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OM protein - protein search, using sw model

Run on: October 21, 2005, 07:10:04 ; Search time 134 Seconds

(without alignments)
5461.655 Million cell updates/sec

Title: US-10-719-385-2

Perfect score: 9007

Sequence: 1 MIRSKITSVLFCRSSREL.....PESOEPLQLVQAFVRHMQR 1753

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1862951 seqs, 417491010 residues

Total number of hits satisfying chosen parameters: 1862951

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
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- 19: /cgn2_6/ptodata/1/pubpaa/US11A_PUBCOMB.pep.*
- 20: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
- 21: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 22: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	9005	100.0	1753	16	US-10-719-385-4
3	9005	100.0	1753	16	US-10-719-385-8
4	9004	100.0	1753	16	US-10-719-385-3
5	9004	100.0	1753	16	US-10-719-385-11
6	9004	100.0	1753	16	US-10-719-385-13
7	9004	100.0	1753	16	US-10-719-385-14
8	9003	100.0	1753	16	US-10-719-385-15
9	9002	99.9	1753	16	US-10-719-385-6
10	9002	99.9	1753	16	US-10-719-385-10
11	9001	99.9	1753	16	US-10-719-385-16

12	8999	99.9	1753	16	US-10-719-385-7	Sequence 7, Appli
13	8999	99.9	1753	16	US-10-719-385-12	Sequence 12, Appli
14	8998	99.9	1753	16	US-10-719-385-18	Sequence 18, Appli
15	8997	99.9	1753	16	US-10-719-385-9	Sequence 9, Appli
16	8997	99.8	1753	16	US-10-719-385-17	Sequence 17, Appli
17	8991	99.8	1753	16	US-10-719-385-19	Sequence 19, Appli
18	8985.5	99.8	1752	16	US-10-719-385-5	Sequence 5, Appli
19	8939	99.2	1745	16	US-10-719-385-21	Sequence 21, Appli
20	8939	99.2	1745	16	US-10-370-715B-544	Sequence 544, App
21	8927	99.1	3534	16	US-10-719-385-22	Sequence 22, Appli
22	8835	98.1	1889	18	US-10-450-763-40265	Sequence 40265, A
23	5270	58.5	1111	16	US-10-719-385-23	Sequence 23, Appli
24	4093	45.4	853	16	US-10-719-385-24	Sequence 24, Appli
25	2420	26.9	525	16	US-10-719-385-25	Sequence 25, Appli
26	446	5.0	100	18	US-10-450-763-40264	Sequence 40264, A
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28	305	3.4	63	14	US-10-106-698-5917	Sequence 5917, Ap
29	292.5	3.2	2013	18	US-10-756-149-5015	Sequence 5015, Ap
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31	197.5	2.2	2060	20	US-11-097-143-39315	Sequence 39315, A
32	189	2.1	1248	20	US-11-097-143-11187	Sequence 11187, A
33	176.5	2.0	2905	16	US-10-437-963-154118	Sequence 154118,
34	175.5	1.9	1676	14	US-10-128-714-8246	Sequence 8246, Ap
35	169.5	1.9	2621	16	US-10-437-963-122168	Sequence 122168,
36	166	1.8	2122	16	US-10-437-963-189782	Sequence 189782,
37	165	1.8	1545	14	US-10-128-714-3246	Sequence 3246, Ap
38	160.5	1.8	2462	16	US-10-437-963-114113	Sequence 114113,
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40	157	1.7	3859	16	US-10-408-765A-354	Sequence 354, App
41	156	1.7	1590	20	US-11-097-143-14280	Sequence 14280, A
42	156	1.7	2627	15	US-10-424-599-256710	Sequence 256710,
43	156	1.7	2733	20	US-11-097-143-9003	Sequence 9003, Ap
44	155	1.7	1557	15	US-10-369-493-2224	Sequence 2224, Ap
45	155	1.7	2834	15	US-10-424-599-256711	Sequence 256711,

ALIGNMENTS

RESULT 1

US-10-719-385-2
; Sequence 2, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-2

Query Match 100.0%; Score 9007; DB 16; Length 1753;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1753; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	MIRSKITSVLFCRSSRELWTLLGRSALRELSOIEAELNKHWRLLGLSYKPPSPS	60
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Qy 421 PELFWGTEPTSGLGIILDSVCGMPPHLLSPLLQLLRALVSGKSTAKKVVYFLDKMSFYNE 480
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Db 1741 IQLVQAFVRHMQR 1753

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US-10-719-385-4
; Sequence 4, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-4

Query Match 100.0%; Score 9005; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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 Qy 1741 IQLVQAFVRHMQR 1753
 Db 1741 IQLVQAFVRHMQR 1753

RESULT 3
 US-10-719-385-8
 ; Sequence 8, Application US/10719385
 ; Publication No. US20040209284A1
 ; GENERAL INFORMATION:
 ; APPLICANT: O'Toole et al.
 ; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
 ; FILE REFERENCE: 22058-582
 ; CURRENT APPLICATION NUMBER: US/10719.385
 ; CURRENT FILING DATE: 2003-11-21
 ; PRIOR APPLICATION NUMBER: PCT/US03/37339
 ; PRIOR FILING DATE: 2003-11-21
 ; PRIOR APPLICATION NUMBER: 60/428,094
 ; PRIOR FILING DATE: 2002-11-21
 ; NUMBER OF SEQ ID NOS: 26
 ; SOFTWARE: Patent In Ver. 2.1
 ; SEQ ID NO 8
 ; LENGTH: 1753
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-719-385-8

Query Match 100.0%; Score 9005; DB 16; Length 1753;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MIRSKITSVLSCFRSSRELMTILGRSALRELSQIEAELNKHWRRLLEGLSYKPPSPS 60
 Db 1 MIRSKITSVLSCFRSSRELMTILGRSALRELSQIEAELNKHWRRLLEGLSYKPPSPS 60
 Qy 61 SAEKVANKDVASPLKELGLRISKPLGDDDEQSVOLLOCYLQSDYRGTRDSVKTVLQDER 120
 Db 61 SAEKVANKDVASPLKELGLRISKPLGDDDEQSVOLLOCYLQSDYRGTRDSVKTVLQDER 120

Db 61 SAEKVANKDVASPLKELGLRISKFLGLDBEQSVQLLQCYLQBDYRGTRDSVKTVLQDER 120
Qy 121 OSQALLIKIADYYEERTCILRCVHLHLLTYFQDERHPYRVEYADCVDKLEKELVSKYRQ 180
Db 121 OSQALLIKIADYYEERTCILRCVHLHLLTYFQDERHPYRVEYADCVDKLEKELVSKYRQ 180
Qy 181 FEELYKTEAPTWETHGNLMTERQVSRWFVOCLEQSMLEIIFLYYAYFEMAPSDLLVLT 240
Db 181 FEELYKTEAPTWETHGNLMTERQVSRWFVOCLEQSMLEIIFLYYAYFEMAPSDLLVLT 240
Qy 241 KMFKEQSGFGRQNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDRRRELHQF 300
Db 241 KMFKEQSGFGRQNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDRRRELHQF 300
Qy 301 AODGLICQDMDCLMTFGDIPHPAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ 360
Db 301 AODGLICQDMDCLMTFGDIPHPAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ 360
Qy 361 YLTRLQSLASGGNDCTTSTACHCVVGLLSFVLTSLELHTLGNQODIIDTACEVLADPDL 420
Db 361 YLTRLQSLASGGNDCTTSTACHCVVGLLSFVLTSLELHTLGNQODIIDTACEVLADPDL 420
Qy 421 PELFWGTEPTSGLGIILDSVCGMFPHLLSPQLLQALRVSGKSTAKVYSFLDKMGFYNE 480
Db 421 PELFWGTEPTSGLGIILDSVCGMFPHLLSPQLLQALRVSGKSTAKVYSFLDKMGFYNE 480
Qy 481 LYKHKPHDVISHEDGTLWRROTCKLYPLGQTNLRIPQGTQGVQVMDLDRAYLVRWEYSY 540
Db 481 LYKHKPHDVISHEDGTLWRROTCKLYPLGQTNLRIPQGTQGVQVMDLDRAYLVRWEYSY 540
Qy 541 SSWTLFTCEITEMILHVVSTADVTOHCORVKPIIDLHVHKVISTDLSIADCLLPTTSRYML 600
Db 541 SSWTLFTCEITEMILHVVSTADVTOHCORVKPIIDLHVHKVISTDLSIADCLLPTTSRYML 600
Qy 601 LQRLTTVISPVDVIAVCNCLTVLAARNPAKVWTDLRHTGFLPFVAHPVSSLSQMSIAE 660
Db 601 LQRLTTVISPVDVIAVCNCLTVLAARNPAKVWTDLRHTGFLPFVAHPVSSLSQMSIAE 660
Qy 661 GNMAGGYGNLLMNSBPQGEYGVTFIARLRLITLVKGQSGTOSQGLVPCVMFVLKMLP 720
Db 661 GNMAGGYGNLLMNSBPQGEYGVTFIARLRLITLVKGQSGTOSQGLVPCVMFVLKMLP 720
Qy 721 SYHKWRVNSHGVEIOICLLELHAILNLNCHETDLHSSHTPSLOFLCICSLAYTEAGOT 780
Db 721 SYHKWRVNSHGVEIOICLLELHAILNLNCHETDLHSSHTPSLOFLCICSLAYTEAGOT 780
Qy 781 VINIMGIGVDTIDMVMAAQPRSDGAEQGGQQLLIKTVKLAFSVTNVIRLKPSPNVVSP 840
Db 781 VINIMGIGVDTIDMVMAAQPRSDGAEQGGQQLLIKTVKLAFSVTNVIRLKPSPNVVSP 840
Qy 841 LEQALSOHGAHGNLLIAVLAKYIYHKHDPALPRLAIQLLKRATVAPMSVYACLGNDA 900
Db 841 LEQALSOHGAHGNLLIAVLAKYIYHKHDPALPRLAIQLLKRATVAPMSVYACLGNDA 900
Qy 901 IRDAFLTRLOSKIEDMRIKWMLIEFLTVAVETQGLLEFLNLEVKDGSKEFSLGW 960
Db 901 IRDAFLTRLOSKIEDMRIKWMLIEFLTVAVETQGLLEFLNLEVKDGSKEFSLGW 960
Qy 961 SCLHAVLELIDSOQDQRYWCPPLHRAAIAFLHALWQDRDSDAMLVLRTKPKWENLTSP 1020
Db 961 SCLHAVLELIDSOQDQRYWCPPLHRAAIAFLHALWQDRDSDAMLVLRTKPKWENLTSP 1020
Qy 1021 LFGTLSPPTSEPSIETCALIMKIIICLEIYYVVGSLDQSLKDTLKKFSIEKRFAYS 1080
Db 1021 LFGTLSPPTSEPSIETCALIMKIIICLEIYYVVGSLDQSLKDTLKKFSIEKRFAYS 1080
Qy 1081 GYKSLAVHVAETEGSSCTSLLEYQMLVSAWRMLIIATTHADIMHLLTDSVVRQLFLDV 1140
Db 1081 GYKSLAVHVAETEGSSCTSLLEYQMLVSAWRMLIIATTHADIMHLLTDSVVRQLFLDV 1140
Qy 1141 LDGTKALLVPASVNCRLGSMKCTLLIILLRQWKRELGSVDEILGPLEILEGVLAQDQ 1200
Db 1141 LDGTKALLVPASVNCRLGSMKCTLLIILLRQWKRELGSVDEILGPLEILEGVLAQDQ 1200

Qy 1201 QLMKTKAKVFSAFITVLQMKEMKVSIDIPOYSQVLNVNVCETLQEEVIALFDQTRHSLALG 1260
Db 1201 QLMKTKAKVFSAFITVLQMKEMKVSIDIPOYSQVLNVNVCETLQEEVIALFDQTRHSLALG 1260
Qy 1261 SATEDKDSMETDDCSRSRHRDQDGVCLVGLHLAKELCEVDEGDSWLVQVTRRLPILPTL 1320
Db 1261 SATEDKDSMETDDCSRSRHRDQDGVCLVGLHLAKELCEVDEGDSWLVQVTRRLPILPTL 1320
Qy 1321 LTTLEVSILRMKQNLHTEATLHLLTLARTQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
Db 1321 LTTLEVSILRMKQNLHTEATLHLLTLARTQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
Qy 1381 TAOTPSASRSKSLDAPSPGWYRLSMSLMEQLLKTLYNLFPEALDFVGVHQRHTLQCLNA 1440
Db 1381 TAOTPSASRSKSLDAPSPGWYRLSMSLMEQLLKTLYNLFPEALDFVGVHQRHTLQCLNA 1440
Qy 1441 VRTVQSLACLAEADHTVGFILQLSNFMKEMHFLPQLMRDIQVNLGYLCOACTSLLSHRK 1500
Db 1441 VRTVQSLACLAEADHTVGFILQLSNFMKEMHFLPQLMRDIQVNLGYLCOACTSLLSHRK 1500
Qy 1501 MLOHYLQNKNGDGLPSAVAQVORPPSAASAAPSSSKQPAADTEASEQQALHTVQYGLLK 1560
Db 1501 MLOHYLQNKNGDGLPSAVAQVORPPSAASAAPSSSKQPAADTEASEQQALHTVQYGLLK 1560
Qy 1561 ILSKTLAALRHFTPDVQCILLDQSLDLAEYNFLFALSFTTPTDSEVAPSGFTLLATVNV 1620
Db 1561 ILSKTLAALRHFTPDVQCILLDQSLDLAEYNFLFALSFTTPTDSEVAPSGFTLLATVNV 1620
Qy 1621 ALNMLGELDKKBEPLTQAVGLSTQAEGRTRLKSLMFTMENCIFYLLISQAMRYLRDPVH 1680
Db 1621 ALNMLGELDKKBEPLTQAVGLSTQAEGRTRLKSLMFTMENCIFYLLISQAMRYLRDPVH 1680
Qy 1681 PRDKQMKQELSELSTLLSSLSRYFRGAPSPSPATGVLPSPQCKSTLSKASPEOEPL 1740
Db 1681 PRDKQMKQELSELSTLLSSLSRYFRGAPSPSPATGVLPSPQCKSTLSKASPEOEPL 1740
Qy 1741 IOLVQAFVRHMQR 1753
Db 1741 IOLVQAFVRHMQR 1753

RESULT 4

US-10-719-385-3
; Sequence 3, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patentin ver. 2.1
; SEQ ID NO 3
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-3

Query Match 100.0%; Score 9004; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MIRSKITSVLSPCRSRELTWILLGRSALRELSQIEALNKHWRLLGLEGLSYKPPSPS 60
Db 1 MIRSKITSVLSPCRSRELTWILLGRSALRELSQIEALNKHWRLLGLEGLSYKPPSPS 60
Qy 61 SAEKVANKDVASPLKELGLRISKFLGLDBEQSVQLLQCYLQBDYRGTRDSVKTVLQDER 120

Db 61 SAEKVKANKVASPLKEVGLRISKFLGDEQSQVLLQCYLQEDYGRTRDSVKTLQDER 120
Qy 121 QSQALILKADYYEERTCIILRCVLHLTYFQDERHPYRVYADCVCKLEKELYSKRQ 180
Db 121 QSQALILKADYYEERTCIILRCVLHLTYFQDERHPYRVYADCVCKLEKELYSKRQ 180
Qy 181 FEELYKTEAPTWEHGNLMTQSRVWFVQCLREQSMLEIIFLYAYFEMAPSDLLVLT 240
Db 181 FEELYKTEAPTWEHGNLMTQSRVWFVQCLREQSMLEIIFLYAYFEMAPSDLLVLT 240
Qy 241 KMFKEQSGSQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRELHOF 300
Db 241 KMFKEQSGSQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRELHOF 300
Qy 301 AQDGLICODMCLMTFGDIIPHAAPVLLAWALLRHTLNPEETSSVVRKIGGTATQLNVFQ 360
Db 301 AQDGLICODMCLMTFGDIIPHAAPVLLAWALLRHTLNPEETSSVVRKIGGTATQLNVFQ 360
Qy 361 YLTRLLQSLAGSGNDCTTSTACMCVYGLLSFVLTSLHLTLGNQDIIIDTACEVLADPSL 420
Db 361 YLTRLLQSLAGSGNDCTTSTACMCVYGLLSFVLTSLHLTLGNQDIIIDTACEVLADPSL 420
Qy 421 PELFWGTPTSGLGIIILDSVCGMFPHILSPLOLLRALVSGKSTAKKYVSFLDKMSFYNE 480
Db 421 PELFWGTPTSGLGIIILDSVCGMFPHILSPLOLLRALVSGKSTAKKYVSFLDKMSFYNE 480
Qy 481 LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNRIIPQGTGQVMLDDRAYLVKWEYSY 540
Db 481 LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNRIIPQGTGQVMLDDRAYLVKWEYSY 540
Qy 541 SSWTLFTCEIEMLHVSTADVIQHCQVKPIIDLHVKVIISTDLADIADCLLPITSRIYML 600
Db 541 SSWTLFTCEIEMLHVSTADVIQHCQVKPIIDLHVKVIISTDLADIADCLLPITSRIYML 600
Qy 601 LQRLTTVISPPVDVIVASVNCCLTVLAARNPAKVTDLRHTGELPVPVAPVPSLSQMSIAE 660
Db 601 LQRLTTVISPPVDVIVASVNCCLTVLAARNPAKVTDLRHTGELPVPVAPVPSLSQMSIAE 660
Qy 661 GNNAGYGNLLMNSQPOGEYGVTTAFRLITLTVKQGLGTSQSGVLPCVMFVLKEMLP 720
Db 661 GNNAGYGNLLMNSQPOGEYGVTTAFRLITLTVKQGLGTSQSGVLPCVMFVLKEMLP 720
Qy 721 SYHKWRYNSHGVEIQGCLILELHAILNLCHETDLHSSHTPSLQFLCISLAYTEAGQT 780
Db 721 SYHKWRYNSHGVEIQGCLILELHAILNLCHETDLHSSHTPSLQFLCISLAYTEAGQT 780
Qy 781 VINIMIGVDTTIDMVMAAQPRSDGAGQGGQGLIKTVKLAPSVTNVIRLKPSPNVVSP 840
Db 781 VINIMIGVDTTIDMVMAAQPRSDGAGQGGQGLIKTVKLAPSVTNVIRLKPSPNVVSP 840
Qy 841 LEQALSOHGAGHNNLIIVLAKYIYHKHDPALPRLAIQLLKRLATVAPKSVVACLGNDAAA 900
Db 841 LEQALSOHGAGHNNLIIVLAKYIYHKHDPALPRLAIQLLKRLATVAPKSVVACLGNDAAA 900
Qy 901 IRDAFLTRLOSKIEDMRKVMILEFTVAVETQPGLIELFLNLEVKDSDGSKFSLGNW 960
Db 901 IRDAFLTRLOSKIEDMRKVMILEFTVAVETQPGLIELFLNLEVKDSDGSKFSLGNW 960
Qy 961 SCLHAVLELIDSQODRYWCPPLHRAAIAFLHALWQDRRDSAMLVLRTPKPFWENLTSP 1020
Db 961 SCLHAVLELIDSQODRYWCPPLHRAAIAFLHALWQDRRDSAMLVLRTPKPFWENLTSP 1020
Qy 1021 LFGTILSPSETSEPIETCALIMKICILEIYVYVKGSLDQSLKDTLKKFSEIKEPAYWS 1080
Db 1021 LFGTILSPSETSEPIETCALIMKICILEIYVYVKGSLDQSLKDTLKKFSEIKEPAYWS 1080
Qy 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWMLIIATTHADIMHLDTSVVRQLFLDV 1140
Db 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWMLIIATTHADIMHLDTSVVRQLFLDV 1140
Qy 1141 LDGTKALLVPASVNCRLGSMKCTLLILLRQWKRELGSVDEILGPLETEILEGVLOAQD 1200

Db 1141 LDGTKALLVPASVNCRLGSMKCTLLILLRQWKRELGSVDEILGPLETEILEGVLOAQD 1200
Qy 1201 QLMKTKAKVFSAFITVLQMKEMKVSIPQYSQVLNVNCETLQBEVIALFPQTRHSLAG 1260
Db 1201 QLMKTKAKVFSAFITVLQMKEMKVSIPQYSQVLNVNCETLQBEVIALFPQTRHSLAG 1260
Qy 1261 SATEDKOSMETDDCSRSRHRDQDGVCLGHLAKELCEVDEDDGSMQVTRRLPILPTL 1320
Db 1261 SATEDKOSMETDDCSRSRHRDQDGVCLGHLAKELCEVDEDDGSMQVTRRLPILPTL 1320
Qy 1321 LTTLEVSILRMKONLHFTTEATLHLTLARTOQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
Db 1321 LTTLEVSILRMKONLHFTTEATLHLTLARTOQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
Qy 1381 TAQTPSASRKSLSLADAPSMPGVYRLSNLSMEQLLKTLYNLFPEALDFVGVHQBRTILOCLNA 1440
Db 1381 TAQTPSASRKSLSLADAPSMPGVYRLSNLSMEQLLKTLYNLFPEALDFVGVHQBRTILOCLNA 1440
Qy 1441 VRTVQSLACLBEADHTVGFILQLSNFMKWHFHLPOLMRDIOVNLGYLCOACTSLLHSRK 1500
Db 1441 VRTVQSLACLBEADHTVGFILQLSNFMKWHFHLPOLMRDIOVNLGYLCOACTSLLHSRK 1500
Qy 1501 MLQHYLQWNGDGLPSAVAQVRQPPPSAASAPSSSKQPAADTEASEQQALHTVQYGLLK 1560
Db 1501 MLQHYLQWNGDGLPSAVAQVRQPPPSAASAPSSSKQPAADTEASEQQALHTVQYGLLK 1560
Qy 1561 ILSKTLAALRHFTPDVQCQILLDQSLDLAENFLFALSFTTPTFDSEVAPSGTLLATVNV 1620
Db 1561 ILSKTLAALRHFTPDVQCQILLDQSLDLAENFLFALSFTTPTFDSEVAPSGTLLATVNV 1620
Qy 1621 ALNMGLDKKKBELTQAVGLSTQAGRTTKSLLMFTMENCIFYLLISQAMRYLRDPAVH 1680
Db 1621 ALNMGLDKKKBELTQAVGLSTQAGRTTKSLLMFTMENCIFYLLISQAMRYLRDPAVH 1680
Qy 1681 PRDKQRMKQELSSSELSTLLSSLSRVFRGAPSSPATGVLPSQPKSTSLSKASPESQBPL 1740
Db 1681 PRDKQRMKQELSSSELSTLLSSLSRVFRGAPSSPATGVLPSQPKSTSLSKASPESQBPL 1740
Qy 1741 IQLVQAFVRHMQR 1753
Db 1741 IQLVQAFVRHMQR 1753

RESULT 5

US-10-719-385-11
; Sequence 11, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10719,385
; PRIORITY FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCI/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 1753
; TYPE: PRN
; ORGANISM: Homo sapiens
US-10-719-385-11

Query Match 100.0%; Score 9004; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MIRKSKITSVLSFCSSRELWTILGRSALRELSQIEALNKHWRRLLEGSLYKPPSPS 60
Db 1 MIRKSKITSVLSFCSSRELWTILGRSALRELSQIEALNKHWRRLLEGSLYKPPSPS 60

Qy 61 SAEKVKANDVASPLKELGRLISKFLGLDBEQSVQLLQCYLOEDYRGTRDSVKTVLQDER 120
 Db 61 SAEKVKANDVASPLKELGRLISKFLGLDBEQSVQLLQCYLOEDYRGTRDSVKTVLQDER 120
 Qy 121 QSQALILKIADYYEERTCILRCVLHLLTYFQDERHPYRVEYADCDVKLEKELVSKYRQ 180
 Db 121 QSQALILKIADYYEERTCILRCVLHLLTYFQDERHPYRVEYADCDVKLEKELVSKYRQ 180
 Qy 181 FEELYKTEAPTWETHGNLATERQVSRWFVOCLEQSMLEIIILLYAYAFEMAPSDLLVLT 240
 Db 181 FEELYKTEAPTWETHGNLATERQVSRWFVOCLEQSMLEIIILLYAYAFEMAPSDLLVLT 240
 Qy 241 KMFKEQGFSGRQTNRLHVLDETMPPFVDRIGYFSAIILVEGMDIESLHKCALDDRELHQF 300
 Db 241 KMFKEQGFSGRQTNRLHVLDETMPPFVDRIGYFSAIILVEGMDIESLHKCALDDRELHQF 300
 Qy 301 AQDGLICODMDCMLTFEGDIPHPAPVLLAWALLRHTLNPEETS SVVRKIGGTAIQLNVPFQ 360
 Db 301 AQDGLICODMDCMLTFEGDIPHPAPVLLAWALLRHTLNPEETS SVVRKIGGTAIQLNVPFQ 360
 Qy 361 YLTRILQSLASGGNDCTTACMCVYGLLSFVLTSLELHNLGNQODIIDTACFVLADPSL 420
 Db 361 YLTRILQSLASGGNDCTTACMCVYGLLSFVLTSLELHNLGNQODIIDTACFVLADPSL 420
 Qy 421 PELFWGTEPTSGLGIILDSVCGMPFPHLLSPLQLLRLALVSGKSTAKKVYSFLDKMGFYNE 480
 Db 421 PELFWGTEPTSGLGIILDSVCGMPFPHLLSPLQLLRLALVSGKSTAKKVYSFLDKMGFYNE 480
 Qy 481 LYKHKPHDVISHEGTLWRROTPKLLYPLGQTNLRIPQGTGQVMDLDRAYILVRWEYSY 540
 Db 481 LYKHKPHDVISHEGTLWRROTPKLLYPLGQTNLRIPQGTGQVMDLDRAYILVRWEYSY 540
 Qy 541 SSWTLFCEIEMLLHVYSTADVIQHCORVKPIIDLHKVISTDLSTADCLLPITSRYML 600
 Db 541 SSWTLFCEIEMLLHVYSTADVIQHCORVKPIIDLHKVISTDLSTADCLLPITSRYML 600
 Qy 601 LQRLTIVISPPVDVIAVCNCLTVLAARNPAKWTDLRHTGFLFPFAHVPVSSLSQMSIAE 660
 Db 601 LQRLTIVISPPVDVIAVCNCLTVLAARNPAKWTDLRHTGFLFPFAHVPVSSLSQMSIAE 660
 Qy 661 GMAAGYGNLLMNSQPGQEGYVGTIAFLRLITTLVKGQLGSTQSGVLVPCVMFVLEMLP 720
 Db 661 GMAAGYGNLLMNSQPGQEGYVGTIAFLRLITTLVKGQLGSTQSGVLVPCVMFVLEMLP 720
 Qy 721 SYHKWRVNSHGVREIQICLLELHAILNLCHETDLHSSHTPSLOFLCICSLAYTEAGOT 780
 Db 721 SYHKWRVNSHGVREIQICLLELHAILNLCHETDLHSSHTPSLOFLCICSLAYTEAGOT 780
 Qy 781 VINIMGIGVDTIDVMMAAQPRSDGAEQGOGLLIKTVKLAFSVTNVIRLKPSPNVVSP 840
 Db 781 VINIMGIGVDTIDVMMAAQPRSDGAEQGOGLLIKTVKLAFSVTNVIRLKPSPNVVSP 840
 Qy 841 LEQALSQHGAGNNLIIAVLAKYIYKHDPALPRALQLLKRLATVAPMSVYACIGNDAAA 900
 Db 841 LEQALSQHGAGNNLIIAVLAKYIYKHDPALPRALQLLKRLATVAPMSVYACIGNDAAA 900
 Qy 901 IRDAFLTRLOSKIEDMKIWKVILEFLVAVETOPGLIEFLNLVLEKDGSGSKFSLGW 960
 Db 901 IRDAFLTRLOSKIEDMKIWKVILEFLVAVETOPGLIEFLNLVLEKDGSGSKFSLGW 960
 Qy 961 SCLHAVLELIDSOQODRYWCPPLHRAAIAFLHALWQDRDSDAMLVLRTPKFWENLTSP 1020
 Db 961 SCLHAVLELIDSOQODRYWCPPLHRAAIAFLHALWQDRDSDAMLVLRTPKFWENLTSP 1020
 Qy 1021 LFGTLSPPTSEPSILETALIMKIIICLEIYYVWKGSLDQSLKOTLKKEFSIEKRFAYWS 1080
 Db 1021 LFGTLSPPTSEPSILETALIMKIIICLEIYYVWKGSLDQSLKOTLKKEFSIEKRFAYWS 1080
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 Db 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLIIITATTHADIMHUTDSVVRQLFLDV 1140
 Qy 1141 LDGTKALLVPASVNCRLRGLSMKCTLLILLRQWKRELGVSDEILGLPTEILEGLVQADQ 1200

Db 1141 LDGTKALLVPASVNCRLRGLSMKCTLLILLRQWKRELGVSDEILGLPTEILEGLVQADQ 1200
 Qy 1201 OLMKTKAKVFSAFITVLQKMKVSDIPOYSQVLNVNVCETLOEBEVIALFDQTRHSLALG 1260
 Db 1201 OLMKTKAKVFSAFITVLQKMKVSDIPOYSQVLNVNVCETLOEBEVIALFDQTRHSLALG 1260
 Qy 1261 SATEDXDSMETDDCSRRDORDGVCVLGLHLAKELCEVDEGDSWLVQVTRRLPLPTL 1320
 Db 1261 SATEDXDSMETDDCSRRDORDGVCVLGLHLAKELCEVDEGDSWLVQVTRRLPLPTL 1320
 Qy 1321 LTTLEVSRLMKQNLHFEATLHLLLTARTQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
 Db 1321 LTTLEVSRLMKQNLHFEATLHLLLTARTQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
 Qy 1381 TAQTPSASRKSILDAPSWPGVYRLSMSLMEQLLKTLYNLFPEALDFVGVHQBETLOCLNA 1440
 Db 1381 TAQTPSASRKSILDAPSWPGVYRLSMSLMEQLLKTLYNLFPEALDFVGVHQBETLOCLNA 1440
 Qy 1441 VRTVQSLACLLEADHTVGFILQSNFPMKWHFHLPOLMRDIOVNLGYLCOACTSLHLSRK 1500
 Db 1441 VRTVQSLACLLEADHTVGFILQSNFPMKWHFHLPOLMRDIOVNLGYLCOACTSLHLSRK 1500
 Qy 1501 MLQHYLQNKXGDLPSAQRVORPPSAASAAPSSSKQPAADTEASEQQAALHTVQYGLLK 1560
 Db 1501 MLQHYLQNKXGDLPSAQRVORPPSAASAAPSSSKQPAADTEASEQQAALHTVQYGLLK 1560
 Qy 1561 ILSKTLAALRHFTPDVCOILLDOSIDLAEYNELFALSFTPTPTDSEVAPSGTLLATVNV 1620
 Db 1561 ILSKTLAALRHFTPDVCOILLDOSIDLAEYNELFALSFTPTPTDSEVAPSGTLLATVNV 1620
 Qy 1621 ALNMGLDKKKEPLTOAVGLSTQAGSTRILKSLMFTMENCIFYLLISQAMRYLRDPAVH 1680
 Db 1621 ALNMGLDKKKEPLTOAVGLSTQAGSTRILKSLMFTMENCIFYLLISQAMRYLRDPAVH 1680
 Qy 1681 PRDKQMKQELSELSTLLSSLSRYFRGAPSPATGVLPSPOGKSTSLSKASPEQEP 1740
 Db 1681 PRDKQMKQELSELSTLLSSLSRYFRGAPSPATGVLPSPOGKSTSLSKASPEQEP 1740
 Qy 1741 IQLVQAFVRHMQR 1753
 Db 1741 IQLVQAFVRHMQR 1753

RESULT 6

US-10-719-385-13
 ; Sequence 13, Application US/10719385
 ; Publication No. US20040209284A1
 ; GENERAL INFORMATION:
 ; APPLICANT: O'Toole et al.
 ; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
 ; FILE REFERENCE: 22058-582
 ; CURRENT APPLICATION NUMBER: US/10/719,385
 ; CURRENT FILING DATE: 2003-11-21
 ; PRIOR APPLICATION NUMBER: PCT/US03/37339
 ; PRIOR FILING DATE: 2003-11-21
 ; PRIOR APPLICATION NUMBER: 60/428,094
 ; PRIOR FILING DATE: 2002-11-21
 ; NUMBER OF SEQ ID NOS: 26
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 13
 ; LENGTH: 1753
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-719-385-13

Query Match 100.0%; Score 9004; DB 16; Length 1753;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MIRKSKITSVLSPCRSRELWTLILGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS 60
 Db 1 MIRKSKITSVLSPCRSRELWTLILGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS 60

Qy 61 SAEVKANKOVASPLKELGLRISKFLGLDEBSVQLQCYLOEDYRGTRDSVKTVLODER 120
 Db 61 SAEVKANKOVASPLKELGLRISKFLGLDEBSVQLQCYLOEDYRGTRDSVKTVLODER 120
 Qy 121 OSQALILKIADYYEERTCIILCVLHLLTYFQDERHPYRVYADCVKLEKELVSKYRQQ 180
 Db 121 OSQALILKIADYYEERTCIILCVLHLLTYFQDERHPYRVYADCVKLEKELVSKYRQQ 180
 Qy 181 FEELYKTEAPWETHGNLWTERQVSRWFVQCLRQSMLEIIFLYAYAFEMAPSDLLVLT 240
 Db 181 FEELYKTEAPWETHGNLWTERQVSRWFVQCLRQSMLEIIFLYAYAFEMAPSDLLVLT 240
 Qy 241 KMFEQFGSGQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRRLHQF 300
 Db 241 KMFEQFGSGQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRRLHQF 300
 Qy 301 AQDGLICQDMCLMTFGDIIPHAAPVLLAWALLRHTLNPEETSSVVRKIGGTATQLNVFQ 360
 Db 301 AQDGLICQDMCLMTFGDIIPHAAPVLLAWALLRHTLNPEETSSVVRKIGGTATQLNVFQ 360
 Qy 361 YLTRLLQSLASGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQDIIIDTACEVLADPSL 420
 Db 361 YLTRLLQSLASGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQDIIIDTACEVLADPSL 420
 Qy 421 PELFWGTEBPTSGLIGIILDSVCGMFFPHLLSPLILQLLRALVSGKSTAKKYVSFLDKMSFYNE 480
 Db 421 PELFWGTEBPTSGLIGIILDSVCGMFFPHLLSPLILQLLRALVSGKSTAKKYVSFLDKMSFYNE 480
 Qy 481 LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNLRIPQGTGVQVMDDRAYLVRWEYSY 540
 Db 481 LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNLRIPQGTGVQVMDDRAYLVRWEYSY 540
 Qy 541 SSWTLFTCEIEMLLHVSTADVIQHCQVKTPIIDLHVKVI STDLSIADCLLPITSRIYML 600
 Db 541 SSWTLFTCEIEMLLHVSTADVIQHCQVKTPIIDLHVKVI STDLSIADCLLPITSRIYML 600
 Qy 601 LQRLTTVISPVDVIASVNCNLTVLAAARNPAKVTDLRHTGFLPFAHVPVSSLSQMSAE 660
 Db 601 LQRLTTVISPVDVIASVNCNLTVLAAARNPAKVTDLRHTGFLPFAHVPVSSLSQMSAE 660
 Qy 661 GNNAGGYGNLLMNSQPGEGVTIAFLRLITTLVKGLGSTQSGLVPCVMFVLKEMLP 720
 Db 661 GNNAGGYGNLLMNSQPGEGVTIAFLRLITTLVKGLGSTQSGLVPCVMFVLKEMLP 720
 Qy 721 SYHKRYNSHGVREIQIGLILIELIHAIIINLCHETDLHSSHTPSLOFLCISLAYTEAGT 780
 Db 721 SYHKRYNSHGVREIQIGLILIELIHAIIINLCHETDLHSSHTPSLOFLCISLAYTEAGT 780
 Qy 781 VININGIGVDTIDMVAAPRSDGAGOGQGLIKTKVLAPSVTNVNNVIRLKPSPNVVSP 840
 Db 781 VININGIGVDTIDMVAAPRSDGAGOGQGLIKTKVLAPSVTNVNNVIRLKPSPNVVSP 840
 Qy 841 LEQALSQHGAGNNLIIVLAKYIYHKHDPALPRLAIQLLKRATVAPMSVYACLGNDAAA 900
 Db 841 LEQALSQHGAGNNLIIVLAKYIYHKHDPALPRLAIQLLKRATVAPMSVYACLGNDAAA 900
 Qy 901 IRDAFLTRLOSKIEDMRIKWMLLEPTVAVETOPGLIELFLNLEVKDSDGSKFESLGNW 960
 Db 901 IRDAFLTRLOSKIEDMRIKWMLLEPTVAVETOPGLIELFLNLEVKDSDGSKFESLGNW 960
 Qy 961 SCLHAVLELIDSQODRYCWPPLLRRAAIAFLHALWQDRRDSAMLVLRTPKFWENLTSP 1020
 Db 961 SCLHAVLELIDSQODRYCWPPLLRRAAIAFLHALWQDRRDSAMLVLRTPKFWENLTSP 1020
 Qy 1021 LFGTILSPSETSEPSILETCALIMKIICLEIYVYVKGSLDQSLKDTLKKFSEIKFPAYWS 1080
 Db 1021 LFGTILSPSETSEPSILETCALIMKIICLEIYVYVKGSLDQSLKDTLKKFSEIKFPAYWS 1080
 Qy 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLIIATTHADIHMLTDSVVRQFLDVLV 1140
 Db 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLIIATTHADIHMLTDSVVRQFLDVLV 1140

Qy 1141 LDGTHALLVPASVNCIRLQSMKCTLLIILLRQWKRELGSVDEILGPTLTEILEGVLOAQ 1200
 Db 1141 LDGTHALLVPASVNCIRLQSMKCTLLIILLRQWKRELGSVDEILGPTLTEILEGVLOAQ 1200
 Qy 1201 QLMKTKAKVFSAFITVLOMKEMKVSIDIPOYSQVLVNCETLQBEVIALFPQTRHSLAG 1260
 Db 1201 QLMKTKAKVFSAFITVLOMKEMKVSIDIPOYSQVLVNCETLQBEVIALFPQTRHSLAG 1260
 Qy 1261 SATDKDSMETDDCSRSRHRDQDQVGVGLGHLAKELCEVDEDDGSMVQVTRRLPILPTL 1320
 Db 1261 SATDKDSMETDDCSRSRHRDQDQVGVGLGHLAKELCEVDEDDGSMVQVTRRLPILPTL 1320
 Qy 1321 LTTLEVSIRMKQNHFTTEATLHLLTLARTOOGATAVAGAGITQSICLPILSVQLSTNG 1380
 Db 1321 LTTLEVSIRMKQNHFTTEATLHLLTLARTOOGATAVAGAGITQSICLPILSVQLSTNG 1380
 Qy 1381 TAQTPSASRSLDAPSPGVTYRLSMLMEQLKTLRYNLFPEALDFVGVHQBRTILOCLNA 1440
 Db 1381 TAQTPSASRSLDAPSPGVTYRLSMLMEQLKTLRYNLFPEALDFVGVHQBRTILOCLNA 1440
 Qy 1441 VRTVQSLACLBEADHTVGFILQLSNFMKWHFHLPLQMRDIQVNLGYLCOACTSLLHSRK 1500
 Db 1441 VRTVQSLACLBEADHTVGFILQLSNFMKWHFHLPLQMRDIQVNLGYLCOACTSLLHSRK 1500
 Qy 1501 MLQHYLQNGDGLPSAQAORVORPPSSAASAPSSKQPAADTEASEQOALHTVQYGLLK 1560
 Db 1501 MLQHYLQNGDGLPSAQAORVORPPSSAASAPSSKQPAADTEASEQOALHTVQYGLLK 1560
 Qy 1561 ILSKTLAALRHFTPDVCOILLADQSLDLAEYNFLPALSTTTTFDSEVAPSGTLLATVNV 1620
 Db 1561 ILSKTLAALRHFTPDVCOILLADQSLDLAEYNFLPALSTTTTFDSEVAPSGTLLATVNV 1620
 Qy 1621 ALNMLGELDKKKEPLTQAVGLSTQAGRTTLKLSLIMFTMENCIFYLLISQAMRYLRDPAVH 1680
 Db 1621 ALNMLGELDKKKEPLTQAVGLSTQAGRTTLKLSLIMFTMENCIFYLLISQAMRYLRDPAVH 1680
 Qy 1681 PRDKQMKQELSELSTLSSLSRYFRGAPSSPATGVLPSPQKSTSLSKASPESQEP 1740
 Db 1681 PRDKQMKQELSELSTLSSLSRYFRGAPSSPATGVLPSPQKSTSLSKASPESQEP 1740
 Qy 1741 IOLVQAFVRHMOR 1753
 Db 1741 IOLVQAFVRHMOR 1753
 RESULT 7
 US-10-719-385-14
 ; Sequence 14, Application US/10719385
 ; Publication No. US2004020284A1
 ; GENERAL INFORMATION:
 ; APPLICANT: O'Toole et al.
 ; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
 ; FILE REFERENCE: 22058-582
 ; CURRENT APPLICATION NUMBER: US/10/719,385
 ; PRIOR FILING DATE: 2003-11-21
 ; PRIOR APPLICATION NUMBER: PCT/US03/37339
 ; FILING DATE: 2003-11-21
 ; PRIOR APPLICATION NUMBER: 60/428,094
 ; PRIOR FILING DATE: 2002-11-21
 ; NUMBER OF SEQ ID NOS: 26
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 14
 ; LENGTH: 1753
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-719-385-14
 Query Match 100.0%; Score 9004; DB 16; Length 1753;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MIRKSKITSVLSCFCSRSRELWILLGRSALRELQIEALNKHWRILLEGSLYKPPSPS 60
 |||||

Db .
Qy 1 MIRSKITSVLSCFRSSRELWTLILGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS 60
61 SAEKVANKDVASPLKELGRIISKFLGLDEQSQVLLQCYLQEDYRGTRDSVKTVLQDER 120
Db 61 SAEKVANKDVASPLKELGRIISKFLGLDEQSQVLLQCYLQEDYRGTRDSVKTVLQDER 120
Qy 121 QSQUALIKIADYYEERTCILRCVHLITVYFQDERHPYRVEYADCVDKLEKELVSKYRQ 180
Db 121 QSQUALIKIADYYEERTCILRCVHLITVYFQDERHPYRVEYADCVDKLEKELVSKYRQ 180
Qy 181 FEBLYTEAPTWETHGNLMTQVSRWFVQCLREQSMLLEIIIFLYIAYFEMASDILLVLT 240
Db 181 FEBLYTEAPTWETHGNLMTQVSRWFVQCLREQSMLLEIIIFLYIAYFEMASDILLVLT 240
Qy 241 KMFKEQSGSRQNRHLVDSTMPFVDRIQYFSALILVEGMDIESLHKCALDRLRELHQF 300
Db 241 KMFKEQSGSRQNRHLVDSTMPFVDRIQYFSALILVEGMDIESLHKCALDRLRELHQF 300
Qy 301 AQDGLICQDMDCMLMTFGDIPHPAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ 360
Db 301 AQDGLICQDMDCMLMTFGDIPHPAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ 360
Qy 361 YLTRLQSLASGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQDDIIDTACEVLDAPSL 420
Db 361 YLTRLQSLASGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQDDIIDTACEVLDAPSL 420
Qy 421 PELFWGTEPTSGLGIILDSVCGMFPPLLSPLQLLRLALVSGKSTAKKVSFLDKMSFYNE 480
Db 421 PELFWGTEPTSGLGIILDSVCGMFPPLLSPLQLLRLALVSGKSTAKKVSFLDKMSFYNE 480
Qy 481 LYKHKPHDVISHEDGTLWRRTQPKLLYPLGQGNLRIPOGTQGVQVMDLDRAYLVRWEYSY 540
Db 481 LYKHKPHDVISHEDGTLWRRTQPKLLYPLGQGNLRIPOGTQGVQVMDLDRAYLVRWEYSY 540
Qy 541 SSWTLFTCEIEMLLHVSTADVIQHCORVKPIIDLHKVISTDLSIADCLLPTTSRIYML 600
Db 541 SSWTLFTCEIEMLLHVSTADVIQHCORVKPIIDLHKVISTDLSIADCLLPTTSRIYML 600
Qy 601 LQRLTTVISPPVDVIAVCNCLTVLAARNPAKWTDLRHGFELPFAHPVSSLSQMSIAE 660
Db 601 LQRLTTVISPPVDVIAVCNCLTVLAARNPAKWTDLRHGFELPFAHPVSSLSQMSIAE 660
Qy 661 GNNAGGYGNLLMNSQPGQGEYGTIAFLRLITLVKGQLGSTQSGGLVPCVMFVKEMLP 720
Db 661 GNNAGGYGNLLMNSQPGQGEYGTIAFLRLITLVKGQLGSTQSGGLVPCVMFVKEMLP 720
Qy 721 SYHKWRVNSHGVRQIGCLILELHAILNLCHETDLHSSHTPSLQFLCISLAYTEAGQT 780
Db 721 SYHKWRVNSHGVRQIGCLILELHAILNLCHETDLHSSHTPSLQFLCISLAYTEAGQT 780
Qy 781 VINIMGIGVDTIDMVMAAQPRSDGAGOGQGLLIKTVKLAFSVTNVNVIRLKPSPNVSP 840
Db 781 VINIMGIGVDTIDMVMAAQPRSDGAGOGQGLLIKTVKLAFSVTNVNVIRLKPSPNVSP 840
Qy 841 LEQALSQHGAGNNLIAVLAKYIYHKHDPALPRLAIQLLKLRLATVAPMSVYACLGNDAAA 900
Db 841 LEQALSQHGAGNNLIAVLAKYIYHKHDPALPRLAIQLLKLRLATVAPMSVYACLGNDAAA 900
Qy 901 IRDAFLTRLQSKIEDMRIKWIMLEFLTVAVETOPGLIELFNLEVKDGSQKSEFSLGMW 960
Db 901 IRDAFLTRLQSKIEDMRIKWIMLEFLTVAVETOPGLIELFNLEVKDGSQKSEFSLGMW 960
Qy 961 SCULHAVLELDSQODRYWCPPLLHRAAIAFLHALWQDRDSAMLVLRTKPKWENLTSP 1020
Db 961 SCULHAVLELDSQODRYWCPPLLHRAAIAFLHALWQDRDSAMLVLRTKPKWENLTSP 1020
Qy 1021 LFGTLPSPSETSEPSILETCALIMKIIICLEYIYVVKGLSDQSLKDTLTKFSEIKRFAYWS 1080
Db 1021 LFGTLPSPSETSEPSILETCALIMKIIICLEYIYVVKGLSDQSLKDTLTKFSEIKRFAYWS 1080
Qy 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLLIITATHADIMHILTDSVVRQLFLDV 1140
Db 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLLIITATHADIMHILTDSVVRQLFLDV 1140

Qy 1141 LDGTKALLVPASVNCNLRGSMKCTLLILLROWKRELGSVDILGPLEILGVLQADQ 1200
Db 1141 LDGTKALLVPSSVNCNLRGSMKCTLLILLROWKRELGSVDILGPLEILGVLQADQ 1200
Qy 1201 QLMKTKAKVFSAFITVLQMKEMKVSIDIPOYSQVLNVNVCETLOEERVIALFDQTRHSLALG 1260
Db 1201 QLMKTKAKVFSAFITVLQMKEMKVSIDIPOYSQVLNVNVCETLOEERVIALFDQTRHSLALG 1260
Qy 1261 SATEDKDSMETDDCSRRHRDQDGVCLGLHLAKELCEVDEGDSWLVQTRRLPILPTL 1320
Db 1261 SATEDKDSMETDDCSRRHRDQDGVCLGLHLAKELCEVDEGDSWLVQTRRLPILPTL 1320
Qy 1321 LTTLEVSRLMKQNLHTEATLHLLTLARTQOGATAVAGAGITQSI1CLPLLSVYQLSTNG 1380
Db 1321 LTTLEVSRLMKQNLHTEATLHLLTLARTQOGATAVAGAGITQSI1CLPLLSVYQLSTNG 1380
Qy 1381 TAQTPSASRKSLDAPSMPGVYRSLMSLMEQLLKTLYNLFPEALDFVGVHQBERTLOCLNA 1440
Db 1381 TAQTPSASRKSLDAPSMPGVYRSLMSLMEQLLKTLYNLFPEALDFVGVHQBERTLOCLNA 1440
Qy 1441 VRTVQSIALCLEEADHTVGFILQLSNEMKWHFHLPOLMRDIOVNLGVLCOACTSLHSHRK 1500
Db 1441 VRTVQSIALCLEEADHTVGFILQLSNEMKWHFHLPOLMRDIOVNLGVLCOACTSLHSHRK 1500
Qy 1501 MLQHYLQNKNGDGLPSAVAQRVORPPSAASAAPSSSKQPAADTEASEQQALHTVQYGLLK 1560
Db 1501 MLQHYLQNKNGDGLPSAVAQRVORPPSAASAAPSSSKQPAADTEASEQQALHTVQYGLLK 1560
Qy 1561 ILSKTLAALRHFTPDVVCQILLDQSLDLAEBYNFALSFSTPTPDSEVAPSGTLLATVNV 1620
Db 1561 ILSKTLAALRHFTPDVVCQILLDQSLDLAEBYNFALSFSTPTPDSEVAPSGTLLATVNV 1620
Qy 1621 ALNMLGELDKKKEPLTQAVCLSTQAGSTRTLKSLMFTMENCIFYLLISQAMRYLRDPAVH 1680
Db 1621 ALNMLGELDKKKEPLTQAVCLSTQAGSTRTLKSLMFTMENCIFYLLISQAMRYLRDPAVH 1680
Qy 1681 PRDKQRMKQELSELSTLLSSLSRYFRRGAPSSPATGVLPSPQGSTSLSKASPESQEPL 1740
Db 1681 PRDKQRMKQELSELSTLLSSLSRYFRRGAPSSPATGVLPSPQGSTSLSKASPESQEPL 1740
Qy 1741 IQLVQAFVRHMQR 1753
Db 1741 IQLVQAFVRHMQR 1753

RESULT 8
US-10-719-385-15
; Sequence 15, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-15

Query Match 100.0%; Score 9003; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1751; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MIRSKITSVLSCFRSSRELWTLILGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS 60


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Db      1  MIRSKITSVLSFCRSSRELITLLGRSALSRELISQIEALNKNWRRLLGLSYKPPSPS 60
Qy      61  SAEKVKANKDVASPLKELGRISKEFLGDBEQSVQLQCYLOEDYGRTRDSVKTVLQDER 120
Db      61  SAEKVKANKDVASPLKELGRISKEFLGDBEQSVQLQCYLOEDYGRTRDSVKTVLQDER 120
Qy     121  QSQALILKIADYYEERTCILRCVLHLLTYFQDERHPYRVEYACVDKLEKELVSKYRQQ 180
Db     121  QSQALILKIADYYEERTCILRCVLHLLTYFQDERHPYRVEYACVDKLEKELVSKYRQQ 180
Qy     181  FEELYKTEAPTWETHGNLWTERQVSRWFVQCLREQSMLEIIFLYYAYFEWAPSDLLAVLT 240
Db     181  FEELYKTEAPTWETHGNLWTERQVSRWFVQCLREQSMLEIIFLYYAYFEWAPSDLLAVLT 240
Qy     241  KMFKEQCGFSGRQNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRRLHQF 300
Db     241  KMFKEQCGFSGRQNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRRLHQF 300
Qy     301  AQDGLICQDMDCLMTFGDIPHPAPVLLAWALLRHTLNPEETSSVVRKIIGTAIQLNVFQ 360
Db     301  AQDGLICQDMDCLMTFGDIPHPAPVLLAWALLRHTLNPEETSSVVRKIIGTAIQLNVFQ 360
Qy     361  YLTRLLQSLASGNDCTTSTACMCVYGLLSFLVLSLELHTLGNQODIIDTACEVLADPSL 420
Db     361  YLTRLLQSLASGNDCTTSTACMCVYGLLSFLVLSLELHTLGNQODIIDTACEVLADPSL 420
Qy     421  PELFWGTEPTSGLGIILDSVCGMPEHLLSPLLQLLRALVSGSKTAKKVYFPLDQMSYNE 480
Db     421  PELFWGTEPTSGLGIILDSVCGMPEHLLSPLLQLLRALVSGSKTAKKVYFPLDQMSYNE 480
Qy     481  LYKHKPHDVISHEDGTLWRRQTPKLLYPLGQTNLRIPQGTVGQVMDLDRAYLVRWEYSY 540
Db     481  LYKHKPHDVISHEDGTLWRRQTPKLLYPLGQTNLRIPQGTVGQVMDLDRAYLVRWEYSY 540
Qy     541  SSWTLFTCEIEMLLHVSTADVIQHCORVKPIIDLHVKVISTDLSIADCLLPITSRIYML 600
Db     541  SSWTLFTCEIEMLLHVSTADVIQHCORVKPIIDLHVKVISTDLSIADCLLPITSRIYML 600
Qy     601  LQRLTTVISPPVDVIVASVNCCLTVLAARNPAKWTDLRHTGFLPFVAHPVSSLSQMSIAE 660
Db     601  LQRLTTVISPPVDVIVASVNCCLTVLAARNPAKWTDLRHTGFLPFVAHPVSSLSQMSIAE 660
Qy     661  GMAAGGYGNLLMNSQEQEGYGVITAFRLITTLVKGLGQSTQSGGLVPCVFMVLEKMLP 720
Db     661  GMAAGGYGNLLMNSQEQEGYGVITAFRLITTLVKGLGQSTQSGGLVPCVFMVLEKMLP 720
Qy     721  SYHKWRYNHSGVREIQGCLILELHAIIINLCHETDLSSHSTPPSLQFLCISLAYTEAGQT 780
Db     721  SYHKWRYNHSGVREIQGCLILELHAIIINLCHETDLSSHSTPPSLQFLCISLAYTEAGQT 780
Qy     781  VINIMGIGVDITDMVMAAQPSDGAEGOGQGLIKTVKLAFSVTNNVIRLKPSPNVVSP 840
Db     781  VINIMGIGVDITDMVMAAQPSDGAEGOGQGLIKTVKLAFSVTNNVIRLKPSPNVVSP 840
Qy     841  LEQALSQHGAGNNLIVAKYIYKHGDPALPRALQLLKELATVAPMSVYACLGNDAAA 900
Db     841  LEQALSQHGAGNNLIVAKYIYKHGDPALPRALQLLKELATVAPMSVYACLGNDAAA 900
Qy     901  IRDAFLTRLOSKIEDMRIKVIMLEBFLTVAVETQGLIELFLNLEVKDGSCKSFSLGMW 960
Db     901  IRDAFLTRLOSKIEDMRIKVIMLEBFLTVAVETQGLIELFLNLEVKDGSCKSFSLGMW 960
Qy     961  SCLHAVLELIDSQODRWYCPPLHRAAIFLHALWQDRDSAMLVLRTPKFWENLTSP 1020
Db     961  SCLHAVLELIDSQODRWYCPPLHRAAIFLHALWQDRDSAMLVLRTPKFWENLTSP 1020
Qy    1021  LFGTLSPSETSEPSILETCALIMKIICLEYVYVVKGLDQSLKDTLKKFSIEKRFAYWS 1080
Db    1021  LFGTLSPSETSEPSILETCALIMKIICLEYVYVVKGLDQSLKDTLKKFSIEKRFAYWS 1080
Qy    1081  GYVKS LAVHVAETEGSSCTSLLEYQMLVSAWRMLLIATTHADIMHILTDSVVRQLFLDV 1140

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Db     1081  GYVKS LAVHVAETEGSSCTSLLEYQMLVSAWRMLLIATTHADIMHILTDSVVRQLFLDV 1140
Qy     1141  LDGTKALLLVASVNCNCLRLGSMCKTLLLIILLRQWKRELGSVDEILGPLETEILGVLQADQ 1200
Db     1141  LDGTKALLLVASVNCNCLRLGSMCKTLLLIILLRQWKRELGSVDEILGPLETEILGVLQADQ 1200
Qy     1201  QIMEKTKAKVPSAFITVLQKMKVSDIPOYSQVLNVNVCETLOBEVLTALFDQTRHSLALG 1260
Db     1201  QIMEKTKAKVPSAFITVLQKMKVSDIPOYSQVLNVNVCETLOBEVLTALFDQTRHSLALG 1260
Qy     1261  SATDEKDSMETDDCSRSRHRDQDQVCGVLGLHLAKELCEVDEDDGSMQVTRRRLPILPTL 1320
Db     1261  SATDEKDSMETDDCSRSRHRDQDQVCGVLGLHLAKELCEVDEDDGSMQVTRRRLPILPTL 1320
Qy     1321  LTTLEVS LRMKQNLHPTFATLHLLLTARTQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
Db     1321  LTTLEVS LRMKQNLHPTFATLHLLLTARTQOGATAVAGAGITQSIICLPLLSVYQLSTNG 1380
Qy     1381  TAQTPSASRSKSLDAPSPGWYRLSMLSMEQLLKTLYNFLEALDFVGVHQRTELOCLNA 1440
Db     1381  TAQTPSASRSKSLDAPSPGWYRLSMLSMEQLLKTLYNFLEALDFVGVHQRTELOCLNA 1440
Qy     1441  VRTVQSLACLCEADHTVGFILQSNFMKEWHFHLPOLMRDIQVNLGVLCOACTSLLHSRK 1500
Db     1441  VRTVQSLACLCEADHTVGFILQSNFMKEWHFHLPOLMRDIQVNLGVLCOACTSLLHSRK 1500
Qy     1501  MLQHYLQNKNGDGLPSAQAQVQRPSPSAASAPSSKQPAADTEASQOALHTVYGLLK 1560
Db     1501  MLQHYLQNKNGDGLPSAQAQVQRPSPSAASAPSSKQPAADTEASQOALHTVYGLLK 1560
Qy     1561  ILSKTLAALRHPTPDVQCILLDQSLDLAEYNFALSFSTTPTFSEVAPSGTLLATVNV 1620
Db     1561  ILSKTLAALRHPTPDVQCILLDQSLDLAEYNFALSFSTTPTFSEVAPSGTLLATVNV 1620
Qy     1621  ALNMGLDKKKEPLTOAVGLSTQAECTRTLKSLMFTMENCYLLISQAMRYLRDPVAVH 1680
Db     1621  ALNMGLDKKKEPLTOAVGLSTQAECTRTLKSLMFTMENCYLLISQAMRYLRDPVAVH 1680
Qy     1681  PRDKQRMKQELSELSELSTLLSSLSRYFRRGAPSPATGVLPSPOGKSTSLSKASPESQEP 1740
Db     1681  PRDKQRMKQELSELSELSTLLSSLSRYFRRGAPSPATGVLPSPOGKSTSLSKASPESQEP 1740
Qy     1741  IQLVQAFVRHMQR 1753
Db     1741  IQLVQAFVRHMQR 1753

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RESULT 9

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US-10-719-385-6
; Sequence 6, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10719,385
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 6
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-6

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Query Match          99.9%; Score 9002; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1752; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 MIRKSKITSVLSCRSRELWTLLIGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS 60
DB 1 MIRKSKITSVLSCRSRELWTLLIGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS 60
QY 61 SAEKVANKDVASPLKELGRISKFLGDEBOSVQLQCYLQEDYRGTRDSVKTVLQDER 120
DB 61 SAEKVANKDVASPLKELGRISKFLGDEBOSVQLQCYLQEDYRGTRDSVKTVLQDER 120
QY 121 QSOALILKADIYYEBERTCILCVLHLLTYFODERHPYRVEYADCVDKLEKELVSKYRQO 180
DB 121 QSOALILKADIYYEBERTCILCVLHLLTYFODERHPYRVEYADCVDKLEKELVSKYRQO 180
QY 181 FEELYKTEAPTETHGNLMTERQVSWFVQCLREQSMLEIIFLYYAYFEMAPSDDLVL 240
DB 181 FEELYKTEAPTETHGNLMTERQVSWFVQCLREQSMLEIIFLYYAYFEMAPSDDLVL 240
QY 241 KMFKEQGFSGRQTNRLHVDETWDPFVDRIQYFSALILVEGMDIESLHKCALDDRRELHQF 300
DB 241 KMFKEQGFSGRQTNRLHVDETWDPFVDRIQYFSALILVEGMDIESLHKCALDDRRELHQF 300
QY 301 AODGLICQDMDCMLMTFGDI PHHAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ 360
DB 301 AODGLICQDMDCMLMTFGDI PHHAPVLLAWALLRHTLNPEETSSVVRKIGGTAINLNVFQ 360
QY 361 YLTRLLQSLASGNGDCTTSTACMCVYGLLSFVLTSLELHTLGNQOIIIDTACEVLADPSL 420
DB 361 YLTRLLQSLASGNGDCTTSTACMCVYGLLSFVLTSLELHTLGNQOIIIDTACEVLADPSL 420
QY 421 PELFWGTEPTSGLGIILDSVCGMFPHLLSPLLQLLRALVSGKSTAKKVYSPFLDKMSFYNE 480
DB 421 PELFWGTEPTSGLGIILDSVCGMFPHLLSPLLQLLRALVSGKSTAKKVYSPFLDKMSFYNE 480
QY 481 LYKHKPHDVISHEDGTLMRRQTPKLIYPLGGQTNLRIPQGTVCQVMDLDRAYLVRWEYSY 540
DB 481 LYKHKPHDVISHEDGTLMRRQTPKLIYPLGGQTNLRIPQGTVCQVMDLDRAYLVRWEYSY 540
QY 541 SSWTLFTCEMILLHVYSTADVIQHCRVKPIIDLHVKVIISTDLSTADCLLPITSIYML 600
DB 541 SSWTLFTCEMILLHVYSTADVIQHCRVKPIIDLHVKVIISTDLSTADCLLPITSIYML 600
QY 601 LQRLTTVISPVDVIVASVNCNLTVAARNPAKVTDLRHTGFLPFVAHPVSSLSQMSISAE 660
DB 601 LQRLTTVISPVDVIVASVNCNLTVAARNPAKVTDLRHTGFLPFVAHPVSSLSQMSISAE 660
QY 661 GNNAGGYGNLLMNSQOQEGYGTIAFLRLITTLVKQLGSTQSGLVPCVMFVLKEMLP 720
DB 661 GNNAGGYGNLLMNSQOQEGYGTIAFLRLITTLVKQLGSTQSGLVPCVMFVLKEMLP 720
QY 721 SYHKWYNSHGVREQIGCLILELIHAILNLCHETDLHSSHPTSLQFLCTCSLAYTEAGOT 780
DB 721 SYHKWYNSHGVREQIGCLILELIHAILNLCHETDLHSSHPTSLQFLCTCSLAYTEAGOT 780
QY 781 VINIMGIGVDTIDMVMAAQPRSDGAEQGGQQLLIKTVKLAFSVTNVIRLKPSPNVVSP 840
DB 781 VINIMGIGVDTIDMVMAAQPRSDGAEQGGQQLLIKTVKLAFSVTNVIRLKPSPNVVSP 840
QY 841 LEQALSQHGAGNNLITAVLAKIYHKHDPALPRLATQLLKRLATVAPMSYIACLGNDAAA 900
DB 841 LEQALSQHGAGNNLITAVLAKIYHKHDPALPRLATQLLKRLATVAPMSYIACLGNDAAA 900
QY 901 IRDAFTLRQSKIEDMRIKVMILEFTVAVETOPGLIELFLNLEVKGDSGKSEFSLGMW 960
DB 901 IRDAFTLRQSKIEDMRIKVMILEFTVAVETOPGLIELFLNLEVKGDSGKSEFSLGMW 960
QY 961 SCLHAVLELIDSOQDRYWCPPPLHRAAIAFLHALWQDRDSAMLVLRTKPKFWEMLTSP 1020
DB 961 SCLHAVLELIDSOQDRYWCPPPLHRAAIAFLHALWQDRDSAMLVLRTKPKFWEMLTSP 1020
QY 1021 LFGTLSPSPSTSPSILETCALIMKIICLIYIYVVGSLDQSLKDTLKKFSIEKRFAYWS 1080
DB 1021 LFGTLSPSPSTSPSILETCALIMKIICLIYIYVVGSLDQSLKDTLKKFSIEKRFAYWS 1080
QY 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLLIATTHADIMHLTDSVVRQLFLDV 1140

DB 1081 GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLLIATTHADIMHLTDSVVRQLFLDV 1140
QY 1141 LDGTKALLLVPAVSNCLRLGSMKCTILLILLILOWKRELGSVDEILGPLEILLEGVLOADQ 1200
DB 1141 LDGTKALLLVPAVSNCLRLGSMKCTILLILLILOWKRELGSVDEILGPLEILLEGVLOADQ 1200
QY 1201 QLMEXTKAKVSAFTITVLQMKEMKYSIDIPOYSQVLNVNVCETLQEEVIALFDOTRHSIALG 1260
DB 1201 QLMEXTKAKVSAFTITVLQMKEMKYSIDIPOYSQVLNVNVCETLQEEVIALFDOTRHSIALG 1260
QY 1261 SATEDKDSMETDDCSRSRHRDQDGVCVLGLHLAKELCEVDEDDGDSWLVQVTRRLPLPTL 1320
DB 1261 SATEDKDSMETDDCSRSRHRDQDGVCVLGLHLAKELCEVDEDDGDSWLVQVTRRLPLPTL 1320
QY 1321 LITLTVSLBMKNLHPTTEATLHLLTLARTOQATAVAGAGITOSTICLPLSVYQLSTNG 1380
DB 1321 LITLTVSLBMKNLHPTTEATLHLLTLARTOQATAVAGAGITOSTICLPLSVYQLSTNG 1380
QY 1381 TAQTPSASRKSIDAPSWPGVYRLSMSIMEQLLKTLYNFELPEALDFVGVHQERTLQCLNA 1440
DB 1381 TAQTPSASRKSIDAPSWPGVYRLSMSIMEQLLKTLYNFELPEALDFVGVHQERTLQCLNA 1440
QY 1441 VRTVQSLACLEBADHTVGFILQLSNFMKEWHFHLPOLMRDIQVNLGYLQCACTSLLSHRK 1500
DB 1441 VRTVQSLACLEBADHTVGFILQLSNFMKEWHFHLPOLMRDIQVNLGYLQCACTSLLSHRK 1500
QY 1501 MLQHYLQNKNGDGLPSAQAQRVORPPSAASAAPSSSKQPAADTEASEQQAALHTVQYGLLK 1560
DB 1501 MLQHYLQNKNGDGLPSAQAQRVORPPSAASAAPSSSKQPAADTEASEQQAALHTVQYGLLK 1560
QY 1561 ILSKTLAALRHPTPDVCOILLDQSLDLASYNFELFALSFTTPTFDSVAPSFGLTLATNVV 1620
DB 1561 ILSKTLAALRHPTPDVCOILLDQSLDLASYNFELFALSFTTPTFDSVAPSFGLTLATNVV 1620
QY 1621 ALNMLGELDKKKEPLTQAVGLSTQAEGRTRLKSLMFTWENCIFYLLISQAMRYLRDPAVH 1680
DB 1621 ALNMLGELDKKKEPLTQAVGLSTQAEGRTRLKSLMFTWENCIFYLLISQAMRYLRDPAVH 1680
QY 1681 PRDKQRMKQELSELSLTLSSLSRYFRRCAPSPATGVLPSQCKSTLSKASPESEPL 1740
DB 1681 PRDKQRMKQELSELSLTLSSLSRYFRRCAPSPATGVLPSQCKSTLSKASPESEPL 1740
QY 1741 IOLVQAFVRHMQR 1753
DB 1741 IOLVQAFVRHMQR 1753

RESULT 10

US-10-719-385-10
; Sequence 10, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 1753
; TYPE: PR1
; ORGANISM: Homo sapiens
US-10-719-385-10

Query Match 99.9%; Score 9002; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MIRSKITSVLSCFRSSRELWTILLGRSALRELSQIEAELNKHRRLLLEGLSYKPPSPS 60
Db 1 MIRSKITSVLSCFRSSRELWTILLGRSALRELSQIEAELNKHRRLLLEGLSYKPPSPS 60
Qy 61 SAEKVANKOVASPLKELGIRISKFLGLDDEQSQVOLLQCYLOEDYGRTRDSVKTQLQDER 120
Db 61 SAEKVANKOVASPLKELGIRISKFLGLDDEQSQVOLLQCYLOEDYGRTRDSVKTQLQDER 120
Qy 121 OSQALILKADYYEERTCILRCVLHLLTYFQDERHPYRVYADCVCKLEKELYSKXROQ 180
Db 121 OSQALILKADYYEERTCILRCVLHLLTYFQDERHPYRVYADCVCKLEKELYSKXROQ 180
Qy 181 FEELYKTEAPTWETHGNLMTQVSRVFWQCLREQSMLEIIFLYAYFEMAPSDLLVLT 240
Db 181 FEELYKTEAPTWETHGNLMTQVSRVFWQCLREQSMLEIIFLYAYFEMAPSDLLVLT 240
Qy 241 KMFKEQGSQTRNHLVDETMDFVDRIGYFSALILVEGMDIESLHKALDDRRRLHQF 300
Db 241 KMFKEQGSQTRNHLVDETMDFVDRIGYFSALILVEGMDIESLHKALDDRRRLHQF 300
Qy 301 AODGLICODMCLMTFGDIIPHAAPVLLAWALLRHTLNPEETSSVVRKIGGTALQLNVFQ 360
Db 301 AODGLICODMCLMTFGDIIPHAAPVLLAWALLRHTLNPEETSSVVRKIGGTALQLNVFQ 360
Qy 361 YLTRLLQSLASGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQDIIIDTACEVLADPSL 420
Db 361 YLTRLLQSLASGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQDIIIDTACEVLADPSL 420
Qy 421 PELFWGTPTSGLGIILDSVCGMPHLLSPQLLQRLALVSGKSTAKKVSFLDKMSFYNE 480
Db 421 PELFWGTPTSGLGIILDSVCGMPHLLSPQLLQRLALVSGKSTAKKVSFLDKMSFYNE 480
Qy 481 LYKXKPHDVI SHEDGTLWRRTPKLLYPLGGQTNLRIPOGTVGVQVMDLDRAYLVRWEYSY 540
Db 481 LYKXKPHDVI SHEDGTLWRRTPKLLYPLGGQTNLRIPOGTVGVQVMDLDRAYLVRWEYSY 540
Qy 541 SSWTLFTCEIEMLLHVVSTADVIQHCQVQKPTIDLVHKVISTDLSIADCLPITSRIYML 600
Db 541 SSWTLFTCEIEMLLHVVSTADVIQHCQVQKPTIDLVHKVISTDLSIADCLPITSRIYML 600
Qy 601 LQRLTTVISPVDVVIASVNCVCLTVLAARNPAKWTDLRHTGFLPVAHPVSVLSQMSIAE 660
Db 601 LQRLTTVISPVDVVIASVNCVCLTVLAARNPAKWTDLRHTGFLPVAHPVSVLSQMSIAE 660
Qy 661 GNNAGGYGNLLMNSQPGEGVTIAFLRLITTLVKGQSGTOSQGLVPCVMFVLKMLP 720
Db 661 GNNAGGYGNLLMNSQPGEGVTIAFLRLITTLVKGQSGTOSQGLVPCVMFVLKMLP 720
Qy 721 SYHKWRVNSHGVEQIGCLILLELHAILNLCHETDLHSSHTPSLQFLCISLAYTEAGOT 780
Db 721 SYHKWRVNSHGVEQIGCLILLELHAILNLCHETDLHSSHTPSLQFLCISLAYTEAGOT 780
Qy 781 VINIMGIGVDTIDMVMQAQPSDGAEGQGGQLIKTKVLAFAFSTNNVIRLKPPSNVYSP 840
Db 781 VINIMGIGVDTIDMVMQAQPSDGAEGQGGQLIKTKVLAFAFSTNNVIRLKPPSNVYSP 840
Qy 841 LEQALSQHGAGNNLIJAVLAKYIYHKHPALPRLAIQLLKRATVAPMSVACLGNDAAA 900
Db 841 LEQALSQHGAGNNLIJAVLAKYIYHKHPALPRLAIQLLKRATVAPMSVACLGNDAAA 900
Qy 901 IRDAFLTRLOSKIEMRLIKWMLLEFLTVAVETOPGLIELFNLNLEVKDGSKGESLGMW 960
Db 901 IRDAFLTRLOSKIEMRLIKWMLLEFLTVAVETOPGLIELFNLNLEVKDGSKGESLGMW 960
Qy 961 SCLHAVLELIDSQQDRYWCPCPLLHRAAIAFLHALWQDRRDSAMLVLRKPKFWENLTP 1020
Db 961 SCLHAVLELIDSQQDRYWCPCPLLHRAAIAFLHALWQDRRDSAMLVLRKPKFWENLTP 1020
Qy 1021 LFGTILSPSETSEPSILETCALIMKICLEIYVVVKGSLDQSLKDTLKKFSIEKRFAYWS 1080
Db 1021 LFGTILSPSETSEPSILETCALIMKICLEIYVVVKGSLDQSLKDTLKKFSIEKRFAYWS 1080

Qy 1081 GYVKS LAVHVAETBGSCTSLLEYOMLVSAWRMLLIATTHADIMHLTDSVVRQLFLDV 1140
Db 1081 GYVKS LAVHVAETBGSCTSLLEYOMLVSAWRMLLIATTHADIMHLTDSVVRQLFLDV 1140
Qy 1141 LDGTKALLVPASVNCIRLGS MKCTLLILLAROKRELGSVDEILGPTEILEGVLOADQ 1200
Db 1141 LDGTKALLVPASVNCIRLGS MKCTLLILLAROKRELGSVDEILGPTEILEGVLOADQ 1200
Qy 1201 QLMKTKAKVFSAFITVLQMKEMKVS DIPQYSQVLNVNVCETLQBEVIALFPQTRHSLAG 1260
Db 1201 QLMKTKAKVFSAFITVLQMKEMKVS DIPQYSQVLNVNVCETLQBEVIALFPQTRHSLAG 1260
Qy 1261 SATDKDSMETDDCSRRHRDQRCVGLGHLAKELCEVDEGDSMLQVTRRPLPILPTL 1320
Db 1261 SATDKDSMETDDCSRRHRDQRCVGLGHLAKELCEVDEGDSMLQVTRRPLPILPTL 1320
Qy 1321 LTTLEVSIRKQNLHTEATLHLLLTARTOOGATAVAGAGITQSICLPLLSVQLSTNG 1380
Db 1321 LTTLEVSIRKQNLHTEATLHLLLTARTOOGATAVAGAGITQSICLPLLSVQLSTNG 1380
Qy 1381 TAQTPSASRKS L DAPS WPGVYRLSMLSMEQLLKTLYNFLPEALDFVGVHQERTLQCLNA 1440
Db 1381 TAQTPSASRKS L DAPS WPGVYRLSMLSMEQLLKTLYNFLPEALDFVGVHQERTLQCLNA 1440
Qy 1441 VRTVQS LACLAEADHTVGFILQSNFMKEMHFLHPOLMRDIOVNLGYLCOACTSLLHSRK 1500
Db 1441 VRTVQS LACLAEADHTVGFILQSNFMKEMHFLHPOLMRDIOVNLGYLCOACTSLLHSRK 1500
Qy 1501 MLQHYLQNKNGDGLPSAQAQRVQRPSSAASAPSSSKQPAADTASEQOALHTVQYGLLK 1560
Db 1501 MLQHYLQNKNGDGLPSAQAQRVQRPSSAASAPSSSKQPAADTASEQOALHTVQYGLLK 1560
Qy 1561 ILSKTLAALRHFTPDVQCOILLDQSLDLAEYNFLPALSFTTPTFSEVAPSFGTLLATVNV 1620
Db 1561 ILSKTLAALRHFTPDVQCOILLDQSLDLAEYNFLPALSFTTPTFSEVAPSFGTLLATVNV 1620
Qy 1621 ALNMLGELDKKKEPLTQAVGLSTQAEGRTRTLKSLMFTMENC FYLLISQAMRYLRDPAVH 1680
Db 1621 ALNMLGELDKKKEPLTQAVGLSTQAEGRTRTLKSLMFTMENC FYLLISQAMRYLRDPAVH 1680
Qy 1681 PRDKQRMKQELSSSELSTLSSLSYFRGAPSSPATGVLPSQPGKSTSLSKASPESQBP 1740
Db 1681 PRDKQRMKQELSSSELSTLSSLSYFRGAPSSPATGVLPSQPGKSTSLSKASPESQBP 1740
Qy 1741 IQLVQAFVRHMQR 1753
Db 1741 IQLVQAFVRHMQR 1753

RESULT 11

US-10-719-385-16
; Sequence 16, Application US/10719385
; Publication No. US2004020284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; PCT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patent in ver. 2.1
; SEQ ID NO 16
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-16

Query Match 99.9%; Score 9001; DB 16; Length 1753;
Best Local Similarity 99.9%; Pred. No. 0;

Matches 1751; Conservative 2; Mismatches 0; Indels 0; Gaps 0;			
QY	1	MIRKSKITSVLSFCRCSRRLWTILLGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS	60
Db	1	MIRKSKITSVLSFCRCSRRLWTILLGRSALRELSQIEAELNKHWRLLLEGLSYKPPSPS	60
QY	61	SAEKVANKDVASPLKELGIRISKFLGLDBEQSVOLLQCYLQBDYGRGTRDSVKTVLQDER	120
Db	61	SAEKVANKDVASPLKELGIRISKFLGLDBEQSVOLLQCYLQBDYGRGTRDSVKTVLQDER	120
QY	121	QSOALLIKADYYEERTCILRVHLITYFQDERHPYRVEYADCVDKLEKELVSKYRQ	180
Db	121	QSOALLIKADYYEERTCILRVHLITYFQDERHPYRVEYADCVDKLEKELVSKYRQ	180
QY	181	FEELYKTEAPTWTETHGNLMTROVSFWVOCLREQSMLLLEIFLYYAYFEMAPSDLLVLT	240
Db	181	FEELYKTEAPTWTETHGNLMTROVSFWVOCLREQSMLLLEIFLYYAYFEMAPSDLLVLT	240
QY	241	KMFKEQGFGRSQRNRLHVDETMDPFVDRIGYFSALILVEGMDIESLHKCALDDRRELHQF	300
Db	241	KMFKEQGFGRSQRNRLHVDETMDPFVDRIGYFSALILVEGMDIESLHKCALDDRRELHQF	300
QY	301	AQDGLICQDMCDMLTFGDIPIHAPVLLAWALLRHTLNPEETS SVVRKIGCTAIQLNVFQ	360
Db	301	AQDGLICQDMCDMLTFGDIPIHAPVLLAWALLRHTLNPEETS SVVRKIGCTAIQLNVFQ	360
QY	361	YLTRLQSLASGNDCTTACMCVYGLLSFVLTSLELHTLGNQDDIIDTACEVLADPSL	420
Db	361	YLTRLQSLASGNDCTTACMCVYGLLSFVLTSLELHTLGNQDDIIDTACEVLADPSL	420
QY	421	PELFWGTEPTSGIGIILDSVCGMFPHLLSPQLLQALRVSGKSTAKKVYSFLDKMSFYNE	480
Db	421	PELFWGTEPTSGIGIILDSVCGMFPHLLSPQLLQALRVSGKSTAKKVYSFLDKMSFYNE	480
QY	481	LYXKHPHDVISHEDGTLWRQTPKLYPLGQGNLRIPOQTVGVQVMDDRAYLVURWEYSY	540
Db	481	LYXKHPHDVISHEDGTLWRQTPKLYPLGQGNLRIPOQTVGVQVMDDRAYLVURWEYSY	540
QY	541	SSWTLFTCELEMLHVVSTADVIQHOCORVKPIIDLHVHKVISTDLSTADCLLPITSRIYML	600
Db	541	SSWTLFTCELEMLHVVSTADVIQHOCORVKPIIDLHVHKVISTDLSTADCLLPITSRIYML	600
QY	601	LQRLTIVISPPVDVIAVCNCLTVLAARNPAKVTDLRHTGFLPFVAHPVSSLSQMSIAE	660
Db	601	LQRLTIVISPPVDVIAVCNCLTVLAARNPAKVTDLRHTGFLPFVAHPVSSLSQMSIAE	660
QY	661	GMNAGGYGNLLMNSQOPQGEYGVTIAPLRILITLVKGQLGSTOSQGLVPCVMFVKEMLP	720
Db	661	GMNAGGYGNLLMNSQOPQGEYGVTIAPLRILITLVKGQLGSTOSQGLVPCVMFVKEMLP	720
QY	721	SYHKWYNSHGVEQIGCLTLELIHAILNLCHETDLHSSHTPSLOFLCICSLAYTEAGOT	780
Db	721	SYHKWYNSHGVEQIGCLTLELIHAILNLCHETDLHSSHTPSLOFLCICSLAYTEAGOT	780
QY	781	VINIMGIVDTIDWMAAQPRSDGAEQOGQQLIKTVKLAFSVTNNVIRLKPSPNVSP	840
Db	781	VINIMGIVDTIDWMAAQPRSDGAEQOGQQLIKTVKLAFSVTNNVIRLKPSPNVSP	840
QY	841	LEQALSQHGAGNNLIATVAKYIYKHDPALPRLAIQLLKRLATVAPMSVYACLGNDAAA	900
Db	841	LEQALSQHGAGNNLIATVAKYIYKHDPALPRLAIQLLKRLATVAPMSVYACLGNDAAA	900
QY	901	IRDAFLTRLOSKI EDMRIKWIILEFLTVAETOPGLIELFLNLEVKDGSQGSKEFSLGWW	960
Db	901	IRDAFLTRLOSKI EDMRIKWIILEFLTVAETOPGLIELFLNLEVKDGSQGSKEFSLGWW	960
QY	961	SCHHAVLELDSQOODRYWCPPLLHRAAIAFLHALWQDRDSDAMLVLRTKPKFWENLTSP	1020
Db	961	SCHHAVLELDSQOODRYWCPPLLHRAAIAFLHALWQDRDSDAMLVLRTKPKFWENLTSP	1020
QY	1021	LFGLTSPSPSTSPSILETCALIMKIICLBIYYVWKGSLDQSLKDTLKPKFSIEKRFAYWS	1080
Db	1021	LFGLTSPSPSTSPSILETCALIMKIICLBIYYVWKGSLDQSLKDTLKPKFSIEKRFAYWS	1080

QY	1081	GYVKSILAVHVAETEGSSCTSLLEYQMLVSAWRMLLIATTHADIMHLTDSVVRRLFLDV	1140
Db	1081	GYVKSILAVHVAETEGSSCTSLLEYQMLVSAWRMLLIATTHADIMHLTDSVVRRLFLDV	1140
QY	1141	LDGTTKALLVPAVSNCLRLGSMKCTLLILLQWKRRELGSVDIELGPLTEILEGVQADQ	1200
Db	1141	LDGTTKALLVPAVSNCLRLGSMKCTLLILLQWKRRELGSVDIELGPLTEILEGVQADQ	1200
QY	1201	QLMEXTKAVFAFATVILQMKEMKVSIDIPOYSQVLNVNVCETLQEEVIALFDOTRHSLALG	1260
Db	1201	QLMEXTKAVFAFATVILQMKEMKVSIDIPOYSQVLNVNVCETLQEEVIALFDOTRHSLALG	1260
QY	1261	SATEDKDSMETDDCSRSRHRDQDGVCVLGLHLAKELCEVDEGDSWLVQTRRLPILPTL	1320
Db	1261	SATEDKDSMETDDCSRSRHRDQDGVCVLGLHLAKELCEVDEGDSWLVQTRRLPILPTL	1320
QY	1321	LTTLEVSLRMKNLHFTTEATLHLLTLARTOQATAVAGAGITQSIICLPLSVYQLSTNG	1380
Db	1321	LTTLEVSLRMKNLHFTTEATLHLLTLARTOQATAVAGAGITQSIICLPLSVYQLSTNG	1380
QY	1381	TAQTPSASRKSIDAPSPGCVYRISMSLMEQLAKTLRYNFLPBALDFVGVHQBERTLQCLNA	1440
Db	1381	TAQTPSASRKSIDAPSPGCVYRISMSLMEQLAKTLRYNFLPBALDFVGVHQBERTLQCLNA	1440
QY	1441	VRTVOSLACLCEADHTVGFILQLSNFMKEWHFHLPOLMRDIOVNLGYLQCACTSLLSHRK	1500
Db	1441	VRTVOSLACLCEADHTVGFILQLSNFMKEWHFHLPOLMRDIOVNLGYLQCACTSLLSHRK	1500
QY	1501	MLQHYLQNKNGDGLPSAVAQVRORPPSAASAAPSSSKQPAADTEASEQALHTVQYGLLK	1560
Db	1501	MLQHYLQNKNGDGLPSAVAQVRORPPSAASAAPSSSKQPAADTEASEQALHTVQYGLLK	1560
QY	1561	ILSKTLAARHFTPDVCOILLDQSLDLAEYNFLFALSFTPTPFDSEVAPSGFTLLATVNV	1620
Db	1561	ILSKTLAARHFTPDVCOILLDQSLDLAEYNFLFALSFTPTPFDSEVAPSGFTLLATVNV	1620
QY	1621	ALNMLGELDKKKEPTLQAVGLSTQABGRTLKSLMFTMENCIFYLLISQAMRYLRDPVAH	1680
Db	1621	ALNMLGELDKKKEPTLQAVGLSTQABGRTLKSLMFTMENCIFYLLISQAMRYLRDPVAH	1680
QY	1681	PRDKQRMKQELSESLSTLLSSLSRYPFRGAPSPATGVLPSPQKSTSLSKASPESQEP	1740
Db	1681	PRDKQRMKQELSESLSTLLSSLSRYPFRGAPSPATGVLPSPQKSTSLSKASPESQEP	1740
QY	1741	IQLVQAFVRHMOR	1753
Db	1741	IQLVQAFVRHMOR	1753

RESULT 12

US-10-719-385-7
; Sequence 7, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-7

Query Match 99.9%; Score 8999; DB 16; Length 1753;

Best Local Similarity 99.9%; Pred. No. 0;			
Matches 1752; Conservative 0; Mismatches 1; Indels 0; Gaps 0;			
Qy	1	MIRSKITSVLSFCRSSRELATILGRSALRELSQIEAELNKHRRLLLEGLSYKPPSPS	60
Db	1	MIRSKITSVLSFCRSSRELATILGRSALRELSQIEAELNKHRRLLLEGLSYKPPSPS	60
Qy	61	SAEKVANKOVASPLKELGLRISKFLGLDERQSQVQLQCYLQEDYRGTRDSVKTVLQDER	120
Db	61	SAEKVANKOVASPLKELGLRISKFLGLDERQSQVQLQCYLQEDYRGTRDSVKTVLQDER	120
Qy	121	QSOALILKIADYYEERTCIILRCVULHLLTYQDERHPYRVEYADCVDKLEKELYSKTRQQ	180
Db	121	QSOALILKIADYYEERTCIILRCVULHLLTYQDERHPYRVEYADCVDKLEKELYSKTRQQ	180
Qy	181	FEELYKTEAPTWETHGNLWTERQVSRWFQCLREOSMLELIIIFLYAYFEMAPSDLLVLT	240
Db	181	FEELYKTEAPTWETHGNLWTERQVSRWFQCLREOSMLELIIIFLYAYFEMAPSDLLVLT	240
Qy	241	KMFKEQGFSGRQTRNHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRELHQF	300
Db	241	KMFKEQGFSGRQTRNHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRELHQF	300
Qy	301	AQDGLICQDMCLMFTFGDI PHHAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ	360
Db	301	AQDGLICQDMCLMFTFGDI PHHAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ	360
Qy	361	YLTRLQSLASGGNDCTTSTACMCVYGLLSFVLTSLELHTLGNODIITDACEVLADPSL	420
Db	361	YLTRLQSLASGGNDCTTSTACMCVYGLLSFVLTSLELHTLGNODIITDACEVLADPSL	420
Qy	421	PELFWGTEPTSGLGIILDSVCMFPPLLSPLQLLALVSGKSTAKKYVSFLDKMSFYNE	480
Db	421	PELFWGTEPTSGLGIILDSVCMFPPLLSPLQLLALVSGKSTAKKYVSFLDKMSFYNE	480
Qy	481	LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNLRIPQGTGVQVMDLDRAYLVRWEYSY	540
Db	481	LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNLRIPQGTGVQVMDLDRAYLVRWEYSY	540
Qy	541	SSWTLFTCEIEMLLHWSTADVI QHCORVKPIIDLVHKVISTDLISADCLLPITSRIYML	600
Db	541	SSWTLFTCEIEMLLHWSTADVI QHCORVKPIIDLVHKVISTDLISADCLLPITSRIYML	600
Qy	601	LQRLTFTVISPVDVIASVCNCLTVLAARNPAKWTDLRHTGFLPFVAHPVSSLSQMSAE	660
Db	601	LQRLTFTVISPVDVIASVCNCLTVLAARNPAKWTDLRHTGFLPFVAHPVSSLSQMSAE	660
Qy	661	GNNAGGYGNLLMNSPOQEGYGTIAFLRLITTLVKGLGTSQSGQLVPCVMFVLKEMLP	720
Db	661	GNNAGGYGNLLMNSPOQEGYGTIAFLRLITTLVKGLGTSQSGQLVPCVMFVLKEMLP	720
Qy	721	SYHKRYNSHGVREIQICLILELIIHALNLCHETDLHSHSTPSLQFLCISLAYTEAGOT	780
Db	721	SYHKRYNSHGVREIQICLILELIIHALNLCHETDLHSHSTPSLQFLCISLAYTEAGOT	780
Qy	781	VNINIGIGVDTIDMVAAPRSDGAGGQGGQLLITVKLAFSVTNVIRLKPSPNVVSP	840
Db	781	VNINIGIGVDTIDMVAAPRSDGAGGQGGQLLITVKLAFSVTNVIRLKPSPNVVSP	840
Qy	841	LEQALSQHGAGNNLIIVLAKYIYHKHDPALPRLAIQLLKRATVAPMSVYACLGNDAAA	900
Db	841	LEQALSQHGAGNNLIIVLAKYIYHKHDPALPRLAIQLLKRATVAPMSVYACLGNDAAA	900
Qy	901	IRDAFLTRLOSKIEDMRKVMLEFLTVAVETQPGLIELFLNLEVKDSDGSKESLGNW	960
Db	901	IRDAFLTRLOSKIEDMRKVMLEFLTVAVETQPGLIELFLNLEVKDSDGSKESLGNW	960
Qy	961	SCHLAVLELIDSQODRYCPCPLHRAATAFLHALWQDRDASMLVLRTPKPFENLTP	1020
Db	961	SCHLAVLELIDSQODRYCPCPLHRAATAFLHALWQDRDASMLVLRTPKPFENLTP	1020
Qy	1021	LFGTLSPPSETSEPSIETCALIMKIIICLEIYVVVKGSLDQSLKDTLKKFSIEKRPAWYS	1080

Db	1021	LFGTLSPPSETSEPSIETCALIMKIIICLEIYVVVKGSLDQSLKDTLKKFSIEKRPAWYS	1080
Qy	1081	GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLLIIATTHADIMHMLTDSVVRQLFLDV	1140
Db	1081	GYVKSIAVHVAETEGSSCTSLLEYQMLVSAWRMLLIIATTHADIMHMLTDSVVRQLFLDV	1140
Qy	1141	LDGTKALLVLPASVNCILRLGSMKCTLLILLRQKRELGSVDEILGPLETEILEGVLOADQ	1200
Db	1141	LDGTKALLVLPASVNCILRLGSMKCTLLILLRQKRELGSVDEILGPLETEILEGVLOADQ	1200
Qy	1201	OLMEKTKAKVPSAFITVLQMKEMKSDIPOYSQSLVLANVCETLQBEVIALFQOTRHSLAG	1260
Db	1201	OLMEKTKAKVPSAFITVLQMKEMKSDIPOYSQSLVLANVCETLQBEVIALFQOTRHSLAG	1260
Qy	1261	SATEDKDSMETDDCSRSRHRDQDQVGLGHLAKELCEVEDGDSMLQVTRRLPILPTL	1320
Db	1261	SATEDKDSMETDDCSRSRHRDQDQVGLGHLAKELCEVEDGDSMLQVTRRLPILPTL	1320
Qy	1321	LTTLVSLRMKQNLHFTTEATLHLLTLARTOOGATAVAGAGITQSIICLPLISVQLSTNG	1380
Db	1321	LTTLVSLRMKQNLHFTTEATLHLLTLARTOOGATAVAGAGITQSIICLPLISVQLSTNG	1380
Qy	1381	TAQTPSASRKSLSLADAPSPGTVRLSLSLMEQLKTLRYNLFPEALDFVGVHQBERTLOCLNA	1440
Db	1381	TAQTPSASRKSLSLADAPSPGTVRLSLSLMEQLKTLRYNLFPEALDFVGVHQBERTLOCLNA	1440
Qy	1441	VRTVQSLACLSEADHTVGFILQLSNFMKEMHFLHPQLMRDIQVNLGYLCQACTSLHSHRK	1500
Db	1441	VRTVQSLACLSEADHTVGFILQLSNFMKEMHFLHPQLMRDIQVNLGYLCQACTSLHSHRK	1500
Qy	1501	MLQHYLQKNGDGLPSAVAQVRQPPSAASAAPSSSKQPAADTEASEQALHTVQYGLLK	1560
Db	1501	MLQHYLQKNGDGLPSAVAQVRQPPSAASAAPSSSKQPAADTEASEQALHTVQYGLLK	1560
Qy	1561	ILSKTLAALRHFTPDVCOILLDQSLDLAEYNFLPALFETPTTFDSEVAPSFCTLLATVNV	1620
Db	1561	ILSKTLAALRHFTPDVCOILLDQSLDLAEYNFLPALFETPTTFDSEVAPSFCTLLATVNV	1620
Qy	1621	ALNMLGELDKKKEPLTQAVGLSTQAEGRTRTLKSLMFTMENCIFYLLISQAMRYLRDPVH	1680
Db	1621	ALNMLGELDKKKEPLTQAVGLSTQAEGRTRTLKSLMFTMENCIFYLLISQAMRYLRDPVH	1680
Qy	1681	PRDKQMKQELSSSELSTLLSLSRYFRGAPSSPATGVLPSPQGSTSLSKASPESQBP	1740
Db	1681	PRDKQMKQELSSSELSTLLSLSRYFRGAPSSPATGVLPSPQGSTSLSKASPESQBP	1740
Qy	1741	IQLVQAFVRHMQR 1753	
Db	1741	IQLVQAFVRHMQR 1753	

RESULT 13

US-10-719-385-12
; Sequence 12, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 12
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-12

Query Match		99.9%;	Score 8999;	DB 16;	Length 1753;	
Best Local Similarity		99.9%;	Pred. No. 0;			
Matches 1752; Conservative		0;	Mismatches	1;	Indels	0; Gaps
Qy	1	MIRSKITSVLSFCRSRRELWTLILGRSALRELSQIEAELNKHWRRLLEGLSYKPPSPS	60			
Db	1	MIRSKITSVLSFCRSRRELWTLILGRSALRELSQIEAELNKHWRRLLEGLSYKPPSPS	60			
Qy	61	SAEKVANKDVASPLKELGRISKFLGDBEQSVQLLOCYQEDYRGTRDSVKTIVLQDER	120			
Db	61	SAEKVANKDVASPLKELGRISKFLGDBEQSVQLLOCYQEDYRGTRDSVKTIVLQDER	120			
Qy	121	OSQALILKADYYEERTCILRCVHLHTVYFQDERHPYRVEYADCDVKLEKELVSKYRQ	180			
Db	121	OSQALILKADYYEERTCILRCVHLHTVYFQDERHPYRVEYADCDVKLEKELVSKYRQ	180			
Qy	181	FEELYKTEAPTWEHGNLMTERQVSRWFVQCLREQSMLEIIIFLYYAYFEMAPSDLLVLT	240			
Db	181	FEELYKTEAPTWEHGNLMTERQVSRWFVQCLREQSMLEIIIFLYYAYFEMAPSDLLVLT	240			
Qy	241	KMFKEQGFGRQNRHLVDETMDPFVDRIQYFSALILVEGMDIESLHKALDDRRRLHQF	300			
Db	241	KMFKEQGFGRQNRHLVDETMDPFVDRIQYFSALILVEGMDIESLHKALDDRRRLHQF	300			
Qy	301	AQDGLICQDMDCMLMFTGDI PHAPVLLAWALLRHTLNPEETS SVVRKIGGTAIQLNVFQ	360			
Db	301	AQDGLICQDMDCMLMFTGDI PHAPVLLAWALLRHTLNPEETS SVVRKIGGTAIQLNVFQ	360			
Qy	361	YLTRLQSLASGGNDC TTTACMCVYGLLSFVLTSLEHLTLGNQDIIIDTACEVLADPSL	420			
Db	361	YLTRLQSLASGGNDC TTTACMCVYGLLSFVLTSLEHLTLGNQDIIIDTACEVLADPSL	420			
Qy	421	PELFWGTETPSGLGIILDSVCGMFPHLLSPQLQLRALVSGKSTAKKYVFLDKMSFYNE	480			
Db	421	PELFWGTETPSGLGIILDSVCGMFPHLLSPQLQLRALVSGKSTAKKYVFLDKMSFYNE	480			
Qy	481	LYKHKPDVJSHEDGTLWRRTQPKLYPLGGQTNLRIPQGTVGQVMDLDRAYLVREYSY	540			
Db	481	LYKHKPDVJSHEDGTLWRRTQPKLYPLGGQTNLRIPQGTVGQVMDLDRAYLVREYSY	540			
Qy	541	SSWTLFTCEIEMLLHVSTADVIQHQRVKPIIDLHVHKVISTDLSTADCLLPITSRIYML	600			
Db	541	SSWTLFTCEIEMLLHVSTADVIQHQRVKPIIDLHVHKVISTDLSTADCLLPITSRIYML	600			
Qy	601	LQRLTTVISPPVDVIASCVNCLTVLAARNPAKWTDLRHTGFLPFVAHPVSSLSQMSIAE	660			
Db	601	LQRLTTVISPPVDVIASCVNCLTVLAARNPAKWTDLRHTGFLPFVAHPVSSLSQMSIAE	660			
Qy	661	GMNAGGYGNLLMNSQPOQEGVGTIAFLRLITTLVKGQSGTOSQGLVPCVMFVKEMLP	720			
Db	661	GMNAGGYGNLLMNSQPOQEGVGTIAFLRLITTLVKGQSGTOSQGLVPCVMFVKEMLP	720			
Qy	721	SYHKWRYNHSGVREQICGLILELTHALNLCHETDLSSHSTPSLQFLICISLAYTEAGQT	780			
Db	721	SYHKWRYNHSGVREQICGLILELTHALNLCHETDLSSHSTPSLQFLICISLAYTEAGQT	780			
Qy	781	VINIMIGVDTIDMVMMAQPRSDGAEQGGQGLLIKTVKLAFSVTNVNRVIRLKPSPNVSP	840			
Db	781	VINIMIGVDTIDMVMMAQPRSDGAEQGGQGLLIKTVKLAFSVTNVNRVIRLKPSPNVSP	840			
Qy	841	LEQALSQGHAGNNLJAVLAKYIVHKHDPALPRALAIQLLKRATVAPMSVYACLGNDAAA	900			
Db	841	LEQALSQGHAGNNLJAVLAKYIVHKHDPALPRALAIQLLKRATVAPMSVYACLGNDAAA	900			
Qy	901	IRDAFLTRLQSKIEDMRIKVMILEFVLAVETQGLJELFLNLEVKGDSGSKEFSIGMW	960			
Db	901	IRDAFLTRLQSKIEDMRIKVMILEFVLAVETQGLJELFLNLEVKGDSGSKEFSIGMW	960			
Qy	961	SCLHAVLELDSQOQDRYWCPLLHRAAIAFLHALWQDRDSAMLVLRTPKFWENLTSP	1020			
Db	961	SCLHAVLELDSQOQDRYWCPLLHRAAIAFLHALWQDRDSAMLVLRTPKFWENLTSP	1020			
Qy	1021	LFGTLPSPSETSEPSILETCALIMKICLEIYVVVKGSLDQSLKDTLCKFSIEKRFAYWS	1080			

Db	1021	LFGTLPSPSETSEPSILETCALIMKICLEIYVVVKGSLDQSLKDTLCKFSIEKRFAYWS	1080			
Qy	1081	GVYKSLAVVAETEGSSCTSILEYQMLVSAWMLIIATTHADIMHLLTDSVVRQLFLDV	1140			
Db	1081	GVYKSLAVVAETEGSSCTSILEYQMLVSAWMLIIATTHADIMHLLTDSVVRQLFLDV	1140			
Qy	1141	LDGTKALLVPAVNCLRLGSMKCTLLILLKQWKRELGSVDIELPLTEILEGVLOAQD	1200			
Db	1141	LDGTKALLVPAVNCLRLGSMKCTLLILLKQWKRELGSVDIELPLTEILEGVLOAQD	1200			
Qy	1201	OLMEKTKAKVSAFATVQLQMKMKVSDIPQYSQVLNVNCETLQEEVIALFDQTRHSLALG	1260			
Db	1201	OLMEKTKAKVSAFATVQLQMKMKVSDIPQYSQVLNVNCETLQEEVIALFDQTRHSLALG	1260			
Qy	1261	SATEDKDSMETDDCSRSRHRDQDGVCLGLHLAKELCEVDEGDSWLVQTRRLPLPTL	1320			
Db	1261	SATEDKDSMETDDCSRSRHRDQDGVCLGLHLAKELCEVDEGDSWLVQTRRLPLPTL	1320			
Qy	1321	LTTLEVSLRMKNLHFTTEATLHLLTLARTQOGATAVAGAGITQSIICLPLSVYQLSTNG	1380			
Db	1321	LTTLEVSLRMKNLHFTTEATLHLLTLARTQOGATAVAGAGITQSIICLPLSVYQLSTNG	1380			
Qy	1381	TAQTPSASRKSLDAPSPGWYRLSMLMBQLLKTLYNFLPEALDFVGVHQERTLOCLNA	1440			
Db	1381	TAQTPSASRKSLDAPSPGWYRLSMLMBQLLKTLYNFLPEALDFVGVHQERTLOCLNA	1440			
Qy	1441	VRTVQSLACLBEADHTVGFILQLSNFMKWHHLPOLMRDIOVNLGYLCOACTSLHSHRK	1500			
Db	1441	VRTVQSLACLBEADHTVGFILQLSNFMKWHHLPOLMRDIOVNLGYLCOACTSLHSHRK	1500			
Qy	1501	MLQHYLQNKNGDGLPSAQAORVPPSAASAAPSSSKQPAADTEASEQALHTVQYGLLK	1560			
Db	1501	MLQHYLQNKNGDGLPSAQAORVPPSAASAAPSSSKQPAADTEASEQALHTVQYGLLK	1560			
Qy	1561	ILSKTLAALRHFTPDVQCILLDQSLDLAEYNFLFALSFTTPTTDFSEVAPSGTLLATVNV	1620			
Db	1561	ILSKTLAALRHFTPDVQCILLDQSLDLAEYNFLFALSFTTPTTDFSEVAPSGTLLATVNV	1620			
Qy	1621	ALNMLGELDKKBEPLTOAVGLSTQAEGRITLKSLLMTWENCFFYLLISOAMRYLRDPAVH	1680			
Db	1621	ALNMLGELDKKBEPLTOAVGLSTQAEGRITLKSLLMTWENCFFYLLISOAMRYLRDPAVH	1680			
Qy	1681	PRDKQMKBELSELSTLLSSLSRYFRRGAPSPATGVLPSPOGKSTLSKASPSQEP	1740			
Db	1681	PRDKQMKBELSELSTLLSSLSRYFRRGAPSPATGVLPSPOGKSTLSKASPSQEP	1740			
Qy	1741	IQLVQAFVRHMQR 1753				
Db	1741	IQLVQAFVRHMQR 1753				

RESULT 14

US-10-719-385-18
; Sequence 18, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719,385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-719-385-18

Query Match 99.9%; Score 8998; DB 16; Length 1753;			
Best Local Similarity 99.9%; Pred. No. 0;			
Matches 1751; Conservative 1; Mismatches 1; Indels 0; Gaps 0;			
Qy	1	MIRSKITSVLSFCRSEBELATILLGRSALBELSQIEAELNKHWRRLLEGLSYKPPSPS	60
Db	1	MIRSKITSVLSFCRSEBELATILLGRSALBELSQIEAELNKHWRRLLEGLSYKPPSPS	60
Qy	61	SAEKVANKOVASPLKELGRISKFLGLDEQSQVQLQCYLOEDYRGTRDSVKTVLODER	120
Db	61	SAEKVANKOVASPLKELGRISKFLGLDEQSQVQLQCYLOEDYRGTRDSVKTVLODER	120
Qy	121	QSQUALIKIADYYEERTCIIIRCVLHLLTYFQDERHPYRVYADCVKLEKELSKYRQ	180
Db	121	QSQUALIKIADYYEERTCIIIRCVLHLLTYFQDERHPYRVYADCVKLEKELSKYRQ	180
Qy	181	FEELYKTEAPTWEHGNLMTERQVSRWFVQCLREQSMLEIIFLYAYFEMAPSDLLVLT	240
Db	181	FEELYKTEAPTWEHGNLMTERQVSRWFVQCLREQSMLEIIFLYAYFEMAPSDLLVLT	240
Qy	241	KMFKEQFGSQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKALDDRRRELHOF	300
Db	241	KMFKEQFGSQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKALDDRRRELHOF	300
Qy	301	AQDGLICQDMCLMTFGDIIPHPAVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ	360
Db	301	AQDGLICQDMCLMTFGDIIPHPAVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFQ	360
Qy	361	YLTRLQSLASGNDCTTSTACMCYVGLLSFVLTSLELHTIGNOODIIDTACEVLADPSL	420
Db	361	YLTRLQSLASGNDCTTSTACMCYVGLLSFVLTSLELHTIGNOODIIDTACEVLADPSL	420
Qy	421	PELFGTEPTSLGIIILDSVCGMPFPHLSPIQLLRLALVSGKSTAKVYSFLDKMSFYNE	480
Db	421	PELFGTEPTSLGIIILDSVCGMPFPHLSPIQLLRLALVSGKSTAKVYSFLDKMSFYNE	480
Qy	481	LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNLRIPQGTVGQVMLDDRAYLVRWEYSY	540
Db	481	LYKXKPHDVI SHEDGTLWRRQTPKLLYPLGGQTNLRIPQGTVGQVMLDDRAYLVRWEYSY	540
Qy	541	SSWTLFTCEIEMLLHVSTADVIQHCORVKPIIDLVHKVISTDLSIADCLLPITSRIYML	600
Db	541	SSWTLFTCEIEMLLHVSTADVIQHCORVKPIIDLVHKVISTDLSIADCLLPITSRIYML	600
Qy	601	LQRLTTVISPVDVITASCNCVCLTVLAARNPAKWTDLRHTGFLPFAHPVSSLSQMSIAE	660
Db	601	LQRLTTVISPVDVITASCNCVCLTVLAARNPAKWTDLRHTGFLPFAHPVSSLSQMSIAE	660
Qy	661	GNNAGGYGNLLMNSRQPOGEYGVTTIAFLRLITTLVKGLGSGTQSGQLVPCVMFVLKEMLP	720
Db	661	GNNAGGYGNLLMNSRQPOGEYGVTTIAFLRLITTLVKGLGSGTQSGQLVPCVMFVLKEMLP	720
Qy	721	SYHKWRYNHSGVREGIGCLILELHAIINLCHETDLHSHSTPSLOFLCISLAYTEAGQT	780
Db	721	SYHKWRYNHSGVREGIGCLILELHAIINLCHETDLHSHSTPSLOFLCISLAYTEAGQT	780
Qy	781	VININGIGVDTIDMVMAPRSDGAGOGQGLIKTVKLAFSVTNVIRLKPSPNVVSP	840
Db	781	VININGIGVDTIDMVMAPRSDGAGOGQGLIKTVKLAFSVTNVIRLKPSPNVVSP	840
Qy	841	LEQALSQHGAGHNNLIIVLAKYIYHKHPPALPRLAIQLLKRATVAPMSVACLGNDA	900
Db	841	LEQALSQHGAGHNNLIIVLAKYIYHKHPPALPRLAIQLLKRATVAPMSVACLGNDA	900
Qy	901	IRDAFLTRLQSKIEDMRKIVMLEFTVAVETQPLIELFLNLEVKDSDGSKFSLGNW	960
Db	901	IRDAFLTRLQSKIEDMRKIVMLEFTVAVETQPLIELFLNLEVKDSDGSKFSLGNW	960
Qy	961	SCLHAVLELIDSOQDRWCPCPLLHRAAIAFLHALWQDRDSAMLVARTKPKFWENLTSP	1020
Db	961	SCLHAVLELIDSOQDRWCPCPLLHRAAIAFLHALWQDRDSAMLVARTKPKFWENLTSP	1020

Qy	1021	LFGTLSPPSETSEPSIETCALINKIICLEIYVYVKGSLDOSLKDITLKKFSIEKRFAYWS	1080
Db	1021	LFGTLSPPSETSEPSIETCALINKIICLEIYVYVKGSLDOSLKDITLKKFSIEKRFAYWS	1080
Qy	1081	GYVKSIAVHVAETEGSSCTSLLEYOMLVSAWRMLLIATTHADIMHMLTDSVVRQLFLDV	1140
Db	1081	GYVKSIAVHVAETEGSSCTSLLEYOMLVSAWRMLLIATTHADIMHMLTDSVVRQLFLDV	1140
Qy	1141	LDGTKALLVPASVNCIRLGRSMCKTLLILLRQWKRELGSVDEILGPJTETILEGVLOADQ	1200
Db	1141	LDGTKALLVPASVNCIRLGRSMCKTLLILLRQWKRELGSVDEILGPJTETILEGVLOADQ	1200
Qy	1201	QLMKTKAKVPSAFITVLOMKEMKVSIPQYSQVLVNCETLOREVIATLPDTRHSALG	1260
Db	1201	QLMKTKAKVPSAFITVLOMKEMKVSIPQYSQVLVNCETLOREVIATLPDTRHSALG	1260
Qy	1261	SATEDKDSMETDDCSRRHRDQDQVGVGLHAKELCEVEDGDSMLQVTRRLPILPTL	1320
Db	1261	SATEDKDSMETDDCSRRHRDQDQVGVGLHAKELCEVEDGDSMLQVTRRLPILPTL	1320
Qy	1321	LTTLEVSRLMKQNLHFTTEATLHLLLTARTQOGATAVAGAGITQSICLPILLSVQLSTNG	1380
Db	1321	LTTLEVSRLMKQNLHFTTEATLHLLLTARTQOGATAVAGAGITQSICLPILLSVQLSTNG	1380
Qy	1381	TAQTPSASRKSILDAPSPGVYRLSMLMEQLLTLRYNPLPEALDFVGVHQBERTLOCLNA	1440
Db	1381	TAQTPSASRKSILDAPSPGVYRLSMLMEQLLTLRYNPLPEALDFVGVHQBERTLOCLNA	1440
Qy	1441	VRTVQSILACLEAEADHTVGFILQLSNFMKEMHFLPQLMRDIQVNLGYLCOACTSLLSHRK	1500
Db	1441	VRTVQSILACLEAEADHTVGFILQLSNFMKEMHFLPQLMRDIQVNLGYLCOACTSLLSHRK	1500
Qy	1501	MLQHYLQKNGDGLPSAQAQRVQRPSSAASAPSSSKQPAADTEASEQOALHTVOYGLLK	1560
Db	1501	MLQHYLQKNGDGLPSAQAQRVQRPSSAASAPSSSKQPAADTEASEQOALHTVOYGLLK	1560
Qy	1561	ILSKTILAAALHFTPDVCOIILLDQSLDLAENFLFALSFTTTFDSEVAPSGTLLATVNV	1620
Db	1561	ILSKTILAAALHFTPDVCOIILLDQSLDLAENFLFALSFTTTFDSEVAPSGTLLATVNV	1620
Qy	1621	ALNMLGELDKKPELTQAVGLSTQAGTRTLKLSLLMFTMENCIFYLLISQAMRYLRDPAVH	1680
Db	1621	ALNMLGELDKKPELTQAVGLSTQAGTRTLKLSLLMFTMENCIFYLLISQAMRYLRDPAVH	1680
Qy	1681	PRDKQRMKQELSSSELSTLLSSLSRYFRFGAPSSPATGVLPSPGQKSTSLSKASPSQBP	1740
Db	1681	PRDKQRMKQELSSSELSTLLSSLSRYFRFGAPSSPATGVLPSPGQKSTSLSKASPSQBP	1740
Qy	1741	IQLVQAFVRRHQR 1753	
Db	1741	IQLVQAFVRRHQR 1753	

RESULT 15

US-10-719-385-9
; Sequence 9, Application US/10719385
; Publication No. US20040209284A1
; GENERAL INFORMATION:
; APPLICANT: O'Toole et al.
; TITLE OF INVENTION: Composition and Method for Treating Lupus Nephritis
; FILE REFERENCE: 22058-582
; CURRENT APPLICATION NUMBER: US/10/719.385
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: PCT/US03/37339
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: 60/428,094
; PRIOR FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 1753
; TYPE: PRT
; ORGANISM: Homo sapiens

US-10-719-385-9									
Query Match 99.9%; Score 8997; DB 16; Length 1753; Best Local Similarity 99.9%; Pred. No. 0; Matches 1752; Conservative 1; Mismatches 0; Indels 0; Gaps 0;									
Qy	1	MIRKSKITSVLSCRSRELTWILLGRSALRELSQIEAEINKHWRRLLEGLSYKPPSPS	60						
Db	1	MIRKSKITSVLSCRSRELTWILLGRSALRELSQIEAEINKHWRRLLEGLSYKPPSPS	60						
Qy	61	SAEKVANKDVASPLKELGIRISKFLGLDEEQSVQLLQCYLOEDYRGRDTSVKTVLQDER	120						
Db	61	SAEKVANKDVASPLKELGIRISKFLGLDEEQSVQLLQCYLOEDYRGRDTSVKTVLQDER	120						
Qy	121	OSQALILKIADYYEERTCILRCVHLHTYFQDERHPYRVEYADCVDKLEKELVSKYRQ	180						
Db	121	OSQALILKIADYYEERTCILRCVHLHTYFQDERHPYRVEYADCVDKLEKELVSKYRQ	180						
Qy	181	FEELYKTEAPTETHGNLMTROVSRWFVOCLEQSMLEIIFLYAYFEMAPSDLLVLT	240						
Db	181	FEELYKTEAPTETHGNLMTROVSRWFVOCLEQSMLEIIFLYAYFEMAPSDLLVLT	240						
Qy	241	KMFKEQSGSRQNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRRELHQF	300						
Db	241	KMFKEQSGSRQNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCALDDRRRELHQF	300						
Qy	301	AQGLICQDMDCMLTFGDIPIHAPVLLAWALLRHTLNPEETS SVVRKIGGTAIQLNVFQ	360						
Db	301	AQGLICQDMDCMLTFGDIPIHAPVLLAWALLRHTLNPEETS SVVRKIGGTAIQLNVFQ	360						
Qy	361	YLRLQLSASGGNDCTTSACMCVGLLSFVLTSLEHLTGNQODIIDTACEVLADPSL	420						
Db	361	YLRLQLSASGGNDCTTSACMCVGLLSFVLTSLEHLTGNQODIIDTACEVLADPSL	420						
Qy	421	PELFWGTEPTSGLGIILDSVCGMFPPLLSLLOLLRALVSGKSTAKKVYFSLDKMSFYNE	480						
Db	421	PELFWGTEPTSGLGIILDSVCGMFPPLLSLLOLLRALVSGKSTAKKVYFSLDKMSFYNE	480						
Qy	481	LYKHKPHDVISHEGTLWRROTPKLLYPLGQGNLRIPQGTVGQVMDLDRAYLVWRWEYSY	540						
Db	481	LYKHKPHDVISHEGTLWRROTPKLLYPLGQGNLRIPQGTVGQVMDLDRAYLVWRWEYSY	540						
Qy	541	SSWTLFTCEITEMLLHVYSTADVLOHCORVKPIIDLVKHVISTDLSADCLLPITTSRYML	600						
Db	541	SSWTLFTCEITEMLLHVYSTADVLOHCORVKPIIDLVKHVISTDLSADCLLPITTSRYML	600						
Qy	601	LQRLTTVISPPVDVIA SCVNCLTVLAARNPAKVMTDLRHTGFLFPFAHPVSSLSQMSIAE	660						
Db	601	LQRLTTVISPPVDVIA SCVNCLTVLAARNPAKVMTDLRHTGFLFPFAHPVSSLSQMSIAE	660						
Qy	661	GMNAGGYGNLLMNSQOQGEYGVTTIAPRLITLTVKGQLGSTQSGLVPCVMFVKEMLP	720						
Db	661	GMNAGGYGNLLMNSQOQGEYGVTTIAPRLITLTVKGQLGSTQSGLVPCVMFVKEMLP	720						
Qy	721	SYHKWRVNSHGVRQICGLILELHATLNLCHETDLHSSHTPSLOFLCICSLAYTEAGQT	780						
Db	721	SYHKWRVNSHGVRQICGLILELHATLNLCHETDLHSSHTPSLOFLCICSLAYTEAGQT	780						
Qy	781	VINIMGIGVDTIDMWMAAQPRSDGAEQGGQQLLIKTVKLAFSVTNNVIRLKPSPSNVSP	840						
Db	781	VINIMGIGVDTIDMWMAAQPRSDGAEQGGQQLLIKTVKLAFSVTNNVIRLKPSPSNVSP	840						
Qy	841	LEQALSQHGAGGNLLIAVLAKYIYHKHDPALPRIAIQLLKRLLATVAPMSYACLGNDAAA	900						
Db	841	LEQALSQHGAGGNLLIAVLAKYIYHKHDPALPRIAIQLLKRLLATVAPMSYACLGNDAAA	900						
Qy	901	IRDAFLTRLOSKIEDMEIKWILEBFLTVAVETQGLLEFLNLEVKDGSKEFSIGMW	960						
Db	901	IRDAFLTRLOSKIEDMEIKWILEBFLTVAVETQGLLEFLNLEVKDGSKEFSIGMW	960						
Qy	961	SCLHAVLELIDSQQDRYWCPPLLHRAAIAFLHALWQDRRDSAMLVLRTKPKFWEMLTSP	1020						
Db	961	SCLHAVLELIDSQQDRYWCPPLLHRAAIAFLHALWQDRRDSAMLVLRTKPKFWEMLTSP	1020						

Search completed: October 21, 2005, 07:32:59
Job time : 141 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 20, 2005, 16:01:56 ; Search time 125 Seconds
(without alignments)
2829.467 Million cell updates/sec

Title: US-10-719-385-2

Perfect score: 9007

Sequence: 1 MIRKSKITSVLSFCRSREL.....PESQELIQLVQAFVRHMQR 1753

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 897115 seqs, 20175920 residues

Total number of hits satisfying chosen parameters: 897115

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Pending Patents AA New:*

- 1: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.psp.*
- 2: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.psp.*
- 3: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.psp.*
- 4: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.psp.*
- 5: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.psp.*
- 6: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.psp.*
- 7: /cgn2_6/ptodata/2/paa/US11_NEW_COMB.psp.*
- 8: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.psp.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	9835	98.1	1889	6	US-10-450-763-40265
2	446	5.0	100	6	US-10-450-763-40265
3	292.5	3.2	2012	8	US-60-664-936-325
4	292.5	3.2	2012	8	US-60-701-038-305
5	292.5	3.2	2012	8	US-60-717-251-660
6	292.5	3.2	2012	8	US-60-717-196-497
7	292.5	3.2	2013	8	US-60-701-038-306
8	292.5	3.2	2013	8	US-60-717-251-661
9	292.5	3.2	2013	8	US-60-717-196-498
10	292.5	3.2	2014	8	US-60-664-936-323
11	292.5	3.2	2015	8	US-60-701-038-308
12	292.5	3.2	2015	8	US-60-717-251-663
13	292.5	3.2	2015	8	US-60-717-196-500
14	291.5	3.2	2012	8	US-60-664-936-324
15	291.5	3.2	2012	8	US-60-701-038-307
16	291.5	3.2	2012	8	US-60-717-251-662
17	291.5	3.2	2012	8	US-60-717-196-499
18	197.5	2.2	2060	7	US-11-097-143-39315
19	189	2.1	1248	7	US-11-097-143-11187
20	163.5	1.8	2432	7	US-11-085-606-668
21	163.5	1.8	2432	7	US-11-085-606-670
22	163.5	1.8	2432	7	US-11-085-606-672
23	163.5	1.8	2433	7	US-11-222-045-1553
24	163.5	1.8	2433	7	US-11-222-045-1554
25	163.5	1.8	2433	7	US-11-222-045-1555

26 163.5 1.8 2433 8 US-60-701-052-813 Sequence 813, App

27 163.5 1.8 2433 8 US-60-701-052-815 Sequence 815, App

28 163.5 1.8 2433 8 US-60-701-052-816 Sequence 816, App

29 163.5 1.8 2433 8 US-60-701-057-316 Sequence 316, App

30 163.5 1.8 2433 8 US-60-701-057-318 Sequence 318, App

31 163.5 1.8 2433 8 US-60-701-057-319 Sequence 319, App

32 163.5 1.8 2433 8 US-60-717-196-1217 Sequence 1217, App

33 163.5 1.8 2433 8 US-60-717-196-1219 Sequence 1219, App

34 163.5 1.8 2433 8 US-60-717-196-1220 Sequence 1220, App

35 163.5 1.8 2433 8 US-60-717-252-523 Sequence 523, App

36 163.5 1.8 2433 8 US-60-717-252-524 Sequence 524, App

37 163.5 1.8 2433 8 US-60-717-252-526 Sequence 526, App

38 163.5 1.8 2632 7 US-11-222-021-1513 Sequence 1513, App

39 163.5 1.8 2632 7 US-11-222-021-1515 Sequence 1515, App

40 163.5 1.8 2632 8 US-60-717-251-477 Sequence 477, App

41 163.5 1.8 2632 8 US-60-717-251-480 Sequence 480, App

42 163.5 1.8 2633 7 US-11-222-021-1511 Sequence 1511, App

43 163.5 1.8 2633 8 US-60-717-251-479 Sequence 479, App

44 159 1.8 2500 6 US-10-990-328A-12455 Sequence 12455, A

45 159 1.8 3698 7 US-11-216-782-8547 Sequence 8547, App

ALIGNMENTS

RESULT 1

US-10-450-763-40265

; Sequence 40265, Application US/10450763

; GENERAL INFORMATION:

; APPLICANT: Hyseq, Inc

; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

; FILE REFERENCE: 790CIP3/US

; CURRENT APPLICATION NUMBER: US/10/450.763

; CURRENT FILING DATE: 2003-06-11

; PRIOR APPLICATION NUMBER: PCT/US01/08631

; PRIOR FILING DATE: 2001-03-30

; PRIOR APPLICATION NUMBER: 09/540,217

; PRIOR FILING DATE: 2000-03-31

; PRIOR APPLICATION NUMBER: 09/649,167

; PRIOR FILING DATE: 2000-08-23

; NUMBER OF SEQ ID NOS: 60736

; SOFTWARE: Custom

; SEQ ID NO 40265

; LENGTH: 1889

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-450-763-40265

Query Match 98.1%; Score 8835; DB 6; Length 1889;

Best Local Similarity 99.1%; Pred. No. 0;

Matches 1727; Conservative 3; Mismatches 9; Indels 4; Gaps 4;

Qy 15 RSSRELWTLIGRSALRELSQIEAELNKHWRRLLEGLSYKPPSPSSAEKVANKDVASP 74

Db 7 RSSRELWTLIGRSALRELSQIEAELNKHWRRLLEGLSYKPPSPSSAEKVANKDVASP 66

Qy 75 LKELGLRISKELGDEQSQVLLQCYLQEDYRGTRDSVKTVLQDERQSOALIKIADYYY 134

Db 67 LKELGLRISKELGDEQSQVLLQCYLQEDYRGTRDSVKTVLQDERQSOALIKIADYYY 126

Qy 135 EERTCILRCVLHLITYFODERHPYRVEYADVCDVKLEKELVSKYRQOFELKYTEAPTWTET 194

Db 127 EERTCILRCVLHLITYFODERHPYRVEYADVCDVKLEKELVSKYRQOFELKYTEAPTWTET 186

Qy 195 HGNLWTERQVSRWFVQCLREQSMLEIIFLYAYFEMAPSDLLVLTNKFQGFSGRQTN 254

Db 187 HGNLWTERQVSRWFVQCLREQSMLEIIFLYAYFEMAPSDLLVLTNKFQGFSGRQTN 246

Qy 255 RHLVDWETMDPVDRIGYFSALILVEGMDIESLHKCALDDRELHQAQDGLTCQMDCLM 314

Db 247 RHLVDWETMDPVDRIGYFSALILVEGMDIESLHKCALDDRELHQAQDGLTCQMDCLM 306

Qy 315 LTFGDIPHPHAPVLLAWALLRHLNPEETS SVVRKGTGTAIQINVPQYLTRLLQSLASGNN 374

Qy	41	NKHWRRLLEG----	LSYK--	PPSPSSAEKV-KANKDVASPLKEIGLR-	81	
Db	26	NALMRROPEAVHLLDKILKHKHPDIFISLFKNPPKNVQOHEKVQKASTSGVATQGOQGRLL	85			
Qy	82	-----ISKFLGDEBQSQVOLLOC--	YLQEDYRG-TRDSVKTVLQDEROSQALIL	127		
Db	86	LPEOLIKEAFILSDLFIDIGELAAVELLAGEHQPHFPLGTRGLVAVLL-----	134			
Qy	128	KIADYYEBERTCIILRCVLUHLL-----	TYFODERHPRYVEVADCDV	167		
Db	135	-----YDNGKRCIANSLKALICQSRGKTWTLELSPELASMTTRFTFDELMEOQLTKYKVL-	188			
Qy	168	KLEKELYSK--YRQOFEELYKTEAPTWTHTGNLMTEROVSRWFVOCLEQSMLEIIFLY	225			
Db	189	-----LVSQIDNNFEKQLQERGLGSEKH-----	RKESDLIKEC--	RQSLAESLPAW	235	
Qy	226	YAYFEMAPSDLLVLTKMFKEQGFSGRSQTRNRLHVDETMDP--	FVDRIGYFSAIILVEGMDI	283		
Db	236	ACQSPLGKEDTLILI-----	GHLERVTVANGSLDVAVNALLMALLYCFDI	281		
Qy	284	-----ESLHKCALDDRRE-----	LHQPAQGLICQDMDCMLTFGDIPH-HAPVYL	327		
Db	282	SFIEQSTEERDDMHQLELLTEKQYIATHSRLODSQLWK-----	LPGLQATVR	330		
Qy	328	LAWALLRHLLN-PE-----	ETSSVVRKIGGTAIQLNVFOYLTRLQLQSLASGNDCTTST	380		
Db	331	LAWALLRGISQLPDVTALAEFTEADEAMAEIAIADNVFLP---	LMESVVVSEYFYQEEF	387		
Qy	381	ACMCVYGILLS--FVLTSLELHTLGNQOD----	IIDTACEVLADPSLP-----	421		
Db	388	YIRRVHNLITDFLALMPKKVQLRNRADEDARMIHMSQMGNPEPISLRDLEHMLLIG	447			
Qy	422	-----ELFWGTPT-----	SLG-----	IILDSVCGMP----	445	
Db	448	EYKKNPFHLSLALEYWCPTPELOPTPTINGSYLGVAAHORPPQOVVLKSFVRQMGDLPP	507			
Qy	446	HLLSPLLQLLRALVSGKSTAKKVYFSLDKMSFYNELYKHKHPDVISHEDGTLWRRQTKL	505			
Db	508	TIYIPLYKMLQGLANGPQCAHYCFSL-----	534			
Qy	506	LYPLGGQTNLRIPOQTVOQVMDDBRAYLVRWEYSYSSWTLFTCEIEMLLHVSTADVIQH	565			
Db	535	--KVNSSSHVENIQAGGSP-----	VSWEHFFHSLMYLH--	EHLKFDLPFSADSVQY	581	
Qy	566	QORVKPIIDLHVHKVISTDLSIADCLLPTSTRYMLLO--	RLTTVISP--	PVDVTLASCVN	620	
Db	582	--RHLPKRGITQK--EQGLIA--	FLOLTSTIITWSENARLALCEHPQWTPVVVLGLLQ	635		
Qy	621	C-----	LTVLAA--	RNP--	AKVWTDLRHTGFLPFVAHPVSSLSQMSIAEGMNAG	665
Db	636	CSIPVVLKAEULLKTLAAGKSPFEIASLWQSLLEYTLQTVRPSRQAGIEVE----	690			
Qy	666	GYGNLLMNSPOQGYGVITAFRLRILITVLVKQLGSTQSQGL-----	PCVMFVLKEMLP	720		
Db	691	-----LNEIERCEBYPTRAFPCOLISTIVBSSFPFNSNLGAGLRPGDFPYLOFLRDSVFL	745			
Qy	721	SYHKWRYNSHGVREIQICLILILHAILNLCHETDLHSSHTPSL-----	QFLCICS--	L	772	
Db	746	RFRTRAYRAAEKWEVAEVLVEVFTKLLR-----	DYBQLEDVFDVQFVeloGEEII	796		
Qy	773	AYTEAG-----	QTVIMINGIGVDITDMVMAAQPSRDSGAEGQGOGLLIKTV	818		

QY 1627 EL-----DKKEPLTOAV-----GLSTQAE-----GTRTLKSLIMFTM 1659
 Db 1839 KLNQVQLPPEIKE-LCQSWPAGVDKISTAQYVLRRLRVKVINNRKLLSLCSFII 1897
 QY 1660 ENCFYLLISQAMRYLRDPVAVH--PRDKQRMKQBSLSLSLSSLSRYFRRGAPSPATG 1717
 Db 1898 ETCLFIL-----WRHLEYLLHCHMPTDSQ-----DSLFSRTLPKSRRRLQDSFAS- 1942
 QY 1718 VLSPQCKSTSL---SKAPESQELIQL-----VQAFVRHMQR 1753
 Db 1943 -----ETNLDFRSGLAIVSQHDLQLQADAINAFGESLQK 1977

RESULT 4
 US-60-701-038-305
 ; Sequence 305, Application US/60701038
 ; GENERAL INFORMATION:
 ; APPLICANT: JOSELOFF, Elizabeth et al.
 ; TITLE OF INVENTION: KIDNEY DISEASE TARGETS AND USES THEREOF
 ; FILE REFERENCE: C0001616
 ; CURRENT APPLICATION NUMBER: US/60701,038
 ; CURRENT FILING DATE: 2005-07-21
 ; NUMBER OF SEQ ID NOS: 1828
 ; SOFTWARE: Fast-Seq for Windows Version 4.0
 ; SEQ ID NO 305
 ; LENGTH: 2012
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-60-701-038-305

Query Match 3.28; Score 292.5; DB 8; Length 2012;

Best Local Similarity 18.98; Pred. No. 7.2e-13; Indels 741; Gaps 104;
 Matches 416; Conservative 303; Mismatches 743;

QY 41 NKHWRLEG-----LSYYK--PPSPSSAEKV-KANKDVASPLKELGLR- 81
 Db 26 NALWRRQPEAVHLLDKILKHKHDFDLSFKNPKVQOHEKVQKASTEGVAIQOQGTSL 85
 QY 82 -----ISKFLGDBEQSVQLQC--YLQEDYRG--TRDSVKTVLQDERSQALIL 127
 Db 86 LPEQLIKEAFILSDLFDIGELAAVELLAGEHQHPHGLTRGLVAVLL----- 134
 QY 128 KIADYVEERTCILRCVHLH-----TYQERHPRYVEYADCVD 167
 Db 135 -----YWDGKRCIANSUKALIQSRGKTWTLELSPELASMTTFTDELMEQGYIKVLT- 188
 QY 168 KLEKELYSK--YRQOFELKYTEAPTETHGNLMTQVSRWFVQCLREQSMLEIIFLY 225
 Db 189 -----LVSQIDVNNFEFKLQERGLGSEKH-----RKEVSDLIKEC--RQSLAESLFAW 235
 QY 226 YAYFEMAPSLLVLTKRMFKEGGFGSGRTNRHLVDENMDP--FVDRIGYPSALLILVEGMDI 283
 Db 236 ACQSPGLKEDTLII-----GHLERVTVVEANGSLDANVALLMALLYCFDI 281
 QY 284 -----ESLHKCALDRRE-----LHQAQDGLICQDMCLMLTFGDIPH-HAPVL 327
 Db 282 SFTEQSTEEDDMIHQPLTEKQYIATIHRSIQDSQLWK-----LPELQATVR 330
 QY 328 LAWALLRHITLN--PE-----ETSSVVRKIGGTALQNLVFOYLTRLQSLASGGNDCTTST 380
 Db 331 LAWALALRGISQLPDVTALAEFTDEAMEALADNVLF--LMESVVVSVFFYQEEF 387
 QY 381 ACMCVGLLS--FVLTSLELHTLGNQOD-----IIDTACEVLADPSLP----- 421
 Db 388 YIRRVHNLITDFALMPMKVKQLNRADDEARMHMSQMGNBPPISLRDLHLMLLIG 447
 QY 422 -----ELFWGTEPT-----SGLG-----IILDSVCGMF-----P 445
 Db 448 ELYKKNPFHLEALEYWCPTPELQPTPTIMSGYLGVAHQRPQOVVLUSKVFVRQMGDLLPP 507
 QY 446 HLASPLQLLRALVSGKSTAKVYSFLDKMSFYNELYKHPHDVISHEDGTLWRRTQPKL 505

Db 508 TIYIPYKMLQGLANGPOCAHYCFSL----- 534
 QY 506 LYPLGGQTNLRIPQGTVGQVMLDDRAYLYRWEYSXSWTLFTCEIEMLLHVVSTADVIOH 565
 Db 535 --KVGSSSHVENIQAGGSP-----VSWEHFFHSLMLYH---EHLRKDLPSADSVQY 581
 QY 566 CORVKPIIDLVHVKVISTDLSIADCLLPITSRYMLIQ--RLTTVISP---PVDVIASCVN 620
 Db 582 --RHLPISRITQK--EQDGLIA--FLQLTSTIITWSENARLALCEHPQWTPVVVILGLLQ 635
 QY 621 C-----LTVLAA--RNP---AKVWTDLRHTGFLPFVAHPVSSLSQMSABGMNAG 665
 Db 636 CSIPPPVLKAECLKTLAAFGKSPKIAASLWQSLQYTOILQTVRIPSRQQAIGIEVE----- 690
 QY 666 GYGNLLMNSQEQGEYGVITAFRLITITLAVKQGLSTQSQGL-----VPCVWFVLKEMLP 720
 Db 691 -----LNEIESRCEEYPLTRAFQCLISTIVESSFPSNLGAGLRPPGDFYQLQRLRSVFL 745
 QY 721 SYHKWRYNSHGVREQIGCLILELIHAILNLCHETDLHSSHTPSL-----QFLCICS---L 772
 Db 746 RFRTRAYRRAAEKWEVAEVVLEVFYKLR-----DYEQLQEDFVQDFVQLQGEI 796
 QY 773 AYTEAG-----QTVINIMGIVDITDMVMAAQPRSDGAEQGGQQLIKTV 818
 Db 797 AYKPPGFSLMYHLLNESPMLLALSLEEGVKQLD--TYAPFPKGKHLKAVQCHCLALLNL 855
 QY 819 KL-AFVTVNNVIRLKPPSNVVSPLQAL---SOHGAHGNLLIATLAKYIYHKHDPALPRL 874
 Db 856 TLQKENLFDMLRBSQALIVCPLEQLQGINPRTKKADNVNVI--ARYIYHGN--TNPEL 912
 QY 875 ATQLKRLATVAPMS-----VYACLGNDAAA--IRDAFLTRL 909
 Db 913 AFESAKILCCISNSNIQIKLVGDFTHDQSIQKLMAGFVECLDCDEAEFVELEBSEL 972
 QY 910 QSKIEDMR--IKVMILEFLTVAVETOPGLIEIF-LNLEVKDSDGSKFESLGMW-----SC 962
 Db 973 EKKLVAIRHETRIHILNLLITSLECNPPNLAALYLLGFLKPKPSTTNLQDPGVLCGPRTC 1032
 QY 963 LHAVLELIDSDQODRYWCPCPLLHRAAIFLHALWQ-----DRDSAMLVLRTPKF 1013
 Db 1033 LHAAILNLSKGTGR--TGPVAVRESPQLAELCYQVIYQLCACSDTSGTMRVLRITSQDF 1090
 QY 1014 WENLTSPLFGTSL--PPSETS-EPSILETCALIMKIICLEIYVYVYVXGSLDQSLKDT--- 1066
 Db 1091 -----LFSQLQYLPFSNKEYEISMLNQMSLWMLKMTASIELRV---SLNRQSRHTQRL 1140
 QY 1067 -----LKKFS-----TEKRFAYWGY----- 1082
 Db 1141 HLLDDMPVKPYSDGSGGIEDENRSVSGFLHFDATKVRKILNILDSDIFSQEIPEPLQ 1200
 QY 1083 -----VKSL-AVHVAETG-----SSCT 1099
 Db 1201 LDFDRAQIEQVANCEHKNLRGQTVCNKLRHRLVVAEVLNQLGMAAIGQRPILLMEIS 1260
 QY 1100 SLLEY-----QMLVSAWRML--LIIATTHADIMHLD--SVVRRQLFLDV-- 1140
 Db 1261 TVLQYVVGKLLQCLHAKHEALESNRQLVEIILTACPDQLQAEDRQLIIRDILODVHD 1320
 QY 1141 --LDGTAKALLVPASVNCILRLGSMKCTLLIILRQMKRELGSVDEILGP----- 1187
 Db 1321 KILDDEAAQELMPVWAGA--VFTLTAHLSQAVLTEQK-----TSVLGPAEAHYAFMLDS 1373
 QY 1188 -----LTETLEGVLQADQQLMEKTKAKVPSAFITVLMK 1221
 Db 1374 CFTSPPEENPLVGFASIGDSSLIYILKLLDPLTKTGGG-FORVTHLYGSLIYVLOIA 1432
 QY 1222 E-----MKVSDIPOYSQVL--NYVCEITLQEEVIALFDQTRHSLALGATED---KDSM 1269
 Db 1433 QRDEPDTLEAAKKTWERLTAPEDVFSLQRENIAIIE-----SYGAALMEWVCRDAC 1486
 QY 1270 ETDDCSRSHRDQDGVVGLHLAKELCEVDDGDSWLVQVTRRLFILPTLLTILEVSLR 1329
 Db 1487 DGHEIGR-----MLALALLDRIVSDKQ-QQWLLYLSNSGYLKVLDVSLVEDDR 1534


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QY 1083 -----VKSL-AVHAETEG-----SSCT 1099
Db 1201 LDFDRAQIEQVIANCEHKNLRGTCVNCVKLLHRVLVAEVNALQGMAAIGQRPLLMEEIS 1260
QY 1100 SLLEY-----QMLYSAMRL--LIIATTHADIMHLD--SVVRRLFLDV-- 1140
Db 1261 TVLOYVVGKLLQCLHAKHALESWRQLVEIILTACPDQLQAEDRQLIIRDLOVDHD 1320
QY 1141 --LDGFKALLVPAVNCVRLGSMKCTLLIILRQWRKLGVSDEILGP----- 1187
Db 1321 KILDEAAQELMPVWAGA--VFTLTAHLSQAVLTEQK-----TSVLGPAEAHYAFMLDS 1373
QY 1188 -----LITEIGVLQADQQLMEKTKAKVFSAPITVLQMK 1221
Db 1374 CFTSPPPEENPLVGFASIGDSSLYIILKLLDPLFKTGGG--FORVTHLYGSLYYLQIA 1432
QY 1222 E-----MKVSDIPIVSQVLV--NVCETIQEVIADFQOTRSLALGATED---KDSM 1269
Db 1433 QRPDEPTLEAAKKTWMERLTAPEDVFSKLORENALIE-----SVGAALMEVVCRDAC 1486
QY 1270 ETDDCSRRHQRDQGVCVGLHAKELCEVDEGDSWLQVTRRLPILPTLLTLEVSUR 1329
Db 1487 DGHEIGR-----MLAALLDRIVSDKQ--QOWLLYLSNSGYLVKLVNDSLVEDDR 1534
QY 1330 MKQN-----LHFTFATLHLLTLARTOOGATAVAGAGITOSICLPLLSVYOLST 1378
Db 1535 TLQSLTTPQPLKALTYESKMAFLTRVAKIOOGALELRSVI--VRLAQCVQYDMRP 1592
QY 1379 NGTAQTPSASR--KSLDAPSGVYRSLMSLMEQLLKTRLNPLFLPEALDFVG-----VHQ 1431
Db 1593 ETDQSMFGNRPDPMTPTVDRYQIILLPALQLCQVILTSSMAQHLQAAGQVLQFLISH 1652
QY 1432 ERTLQCLNAVTVQSLACLSEADHTVGFILQLSNFKEMHFFHLPQLMR--DIOVNLGYLC 1489
Db 1653 SDTIQAILRCQDV--SAGSLQELALLTGIIISKAA-----LPGILSELDDVDNBSGLM 1702
QY 1490 Q-----ACTSLH-----SRKMLQHYLQNKNGDGLPSAVAQVRQRPSPAASAAPSS 1535
Db 1703 ELQHGTRFORQCLGLLSRFGSGDRUKQFKQDNVEG-----DKV 1743
QY 1536 SKOPAADTEASEQALHTVQYGLLKILSKTLAALRHFTPDVCQILLDQSLDLAEYNFLFA 1595
Db 1744 SKKDEIEL-AMQICANVMEY-----CQSLMQS-----SPTFOHA 1778
QY 1596 LSTTPTFDSEV-----APSGTLLATVNVALN-----MLG 1626
Db 1779 VCLFTPSLSETVRDGPQDTQAPVVPYWRPLGGLHIIYLLKQSANDDFFSYSDSHRQSVS 1838
QY 1627 EL-----DKKEPLTOAV-----GLSTQAE-----GTRTLKSLLMFTM 1659
Db 1839 KLNVEQLPDEIKE-LQCSWPAQVDVKISTAQYVLARRRLVKVINNRKLLSLCSFII 1897
QY 1660 ENCFYLLISQAMRYLRDPVAVH--PRDKQRMKQELSELSTLSSLSRYFRGRAPSSPATG 1717
Db 1898 ETCLFIL-----WRHLEYLLHCHPTDSQ-----DSLFASTRILFKSRRLLQDSFAS- 1942
QY 1718 VLPSPOKSTSL---SKASPESQELIQL-----VQAFVRMQR 1753
Db 1943 -----ETNLDPRSGLAIVSQHDLQLOQADAINAFGESLOK 1977
```

RESULT 6

```
US-60-717-196-497
; Sequence 497, Application US/60717196
; GENERAL INFORMATION:
; APPLICANT: Mehdi MESRI et al.
; TITLE OF INVENTION: STOWACH DISEASE TARGETS AND USES THEREOF
; FILE REFERENCE: CL001631
; CURRENT APPLICATION NUMBER: US/60717,196
; CURRENT FILING DATE: 2005-09-16
; NUMBER OF SEQ ID NOS: 2826
; SOFTWARE: FastSeq for Windows Version 4.0
```

```
; SEQ ID NO 497
; LENGTH: 2012
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-717-196-497
```

Query Match 3.2%; Score 292.5; DB 8; Length 2012;

Best Local Similarity 18.9%; Pred. No. 7.2e-13;

Matches 416; Conservative 303; Mismatches 743; Indels 741; Gaps 104;

```
QY 41 NKHWRRLLEG-----LSYK--PPSPSSAEKV-KANKVASPLKEIGLR- 81
Db 26 NALWRRQPEAVHLLDKILKKHKPDPFISLFKNPPKNVQCKEYQKASTEGVIAQGOQGTSL 85
QY 82 -----LSKFLGDEEQSVLLQ--YLOEDYRG-TRDSVKTVLQDERQSQALL 127
Db 86 LPEQLIKEAFIUSDLELGAELLAELLAGEHQPHFGTLRGLVAVLL----- 134
QY 128 KIADYYEERTCILRCVLHLL-----TYFQDERHPYRVEYADCDV 167
Db 135 -----YWDCKRCIANSLKALIOSRRGKTWTLSELSPELASMTTFTDELMEQGLTYKVL- 188
QY 168 KLEKELVSK--YRQPEELYKTEAPTWETHGNLMTERQVSRWFVQCLRQSMLEILFLY 225
Db 189 -----LVSQIDVNNPEKLRERGLGSEKH-----RKEYSDLIKEC---RQSLAESLFAW 235
QY 226 YAYFENAPSDLLVLTKWFKEQGSGRQTNRHVLVDEMDP--FVDRIGYFSALILVSGMDI 283
Db 236 ACOSPLGKEDTLILLI-----GHLERVTEANGSLDVAVNLALLMALLCYCFDI 281
QY 284 -----BSLHKCALDDRRE---LHQAQDGLICQDMDCMLMTFGDIPH-HAPVL 327
Db 282 SFIEQSTEERDWHQPLPTEKQIYATIHSLRQDSQLWK-----LFGLOATVR 330
QY 328 LAWALLRHTLN--PE-----ETSSVVRKIGGTAIQINVFQYLRLLQSLASGNDCTTST 380
Db 331 LAWALALRGISQLPDPVTALAEFTEADEMAELADNVFLF---LMESVVVSEFYQBEF 387
QY 381 ACMCVYGLLS--FVLTSLELHTIGNOOD---IIDTACEVLADPSLP----- 421
Db 388 YIRRVHNLITDFALMPKVKQLNRNADADARMIHSMQMGNEPPISLRDLHMLLIG 447
QY 422 -----ELFWGTEPT-----SGLG-----IILDSVCGMF-----P 445
Db 448 ELYKKNPFHLEALEYWCPTPLQPTPTIMGSVLGVAHQRPQQRQVLSKFRVQMGDLPP 507
QY 446 HLLSLPQLLRLRALVSKSTAKKVVYSLDKVMSFNELYKHKHPDIVSHEDGTLWRRQPKL 505
Db 508 TIYIPYKMLQGLANGPOCAHYCFSL----- 534
QY 506 LYPLGGOTNLRIPOGTGVQVMDLDDRAYLVRYEYSYSSWTFTCEIEMLLHVSTADVIOH 565
Db 535 --KVGSSHVNTIQAGGSP-----VSWEHFFHSLMLYH---EHLRKDLFSASVOY 581
QY 566 CQRVKPIIDLVHVKVISTLSIADCLLPITTSRIYMLLQ--RLTTVISP---PVDVIASCVN 620
Db 582 --RHLFSRGITQK--EQDGLIA--FLQJLSTIITWSENARLALCEHPQWTPVVVILGLLQ 635
QY 621 C-----LTVLAA--RNP---AKVWTDLRHTGFLPVAHPVSVLSQMSIAEGNNAG 665
Db 636 CSIPPVKKAELKTLAAGKSPSEIAASLWQSLQSLQSLQSLQSLQSLQSLQSLQSLQSLQSL 690
QY 666 GYGNLLMNSEPOQGEYGVITAFRLITLTVKQGLGSTQSQGL-----VPCVMVLKEMLP 720
Db 691 -----LNEIESRCEEPTLTRAFCQLISTLVSEFSPNGLNGLRPPGDFYVQLRSLSVFL 745
QY 721 SYHKWRYNSHGVRQEQICLILELIHAILNLCHEFTDLHSSHSTPSL-----QFLCICS---L 772
Db 746 RFRTRAYRRAAEKWEVAEVVLEVYKLLR-----DYEPOLEDVFDQFVBLQGEI 796
QY 773 AYTEAG-----QTVINIMGTVDITDMVMAAQPRSDGAEGGQQLIKTV 818
Db 797 AYKPPGFSLMYHLLNESPMLLEALSLEEGVKQLD--TYAPFPCKKHLEKAVQHCLALINL 855
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Qy 819 KL-AFSTNNVIRLKPSNVVSPLEQAL---SORGAHGNLNIJAVLAKYIYHKHDPALPRL 874
Db 856 TLQENLFMDLLRESQALALVCPLEQLLQGINPRTKADNVNI-ARYLYHGN--TNPEL 912
Qy 875 AIQLLKRLATVAPMS-----VYACIGNDAAA--IRDAFLTRL 909
Db 913 APESAKILCCICSNSTIQIKLVGFTHDQSIQKLMAGFVECLDCEDABEFVLEEGSEL 972
Qy 910 QSKTEDNR--IKWMLBFLTVAVETQPLIELF--INLEVKDGDGSKFSLGMW---SC 962
Db 973 EKKLVATRHETRIHLLMLTSLCENPNALALYLLGFELKXPKVPSTTNLQDPGVLCGRYC 1032
Qy 963 LHAVLELDSQQDRYCMCPPLHRAAIAFLHALWQ-----DRDSDAMLVIRTKPKF 1013
Db 1033 LHA1NILEKTEGR--TGPVAVRESQALBLCYQVIYQLCACSDTSGPTMYRLRTSQDF 1090
Qy 1014 WENUTSPLFTGLS--PSETS-EPSILETCALIMKIICLEIYVYVKSGLDSLOKDT--- 1066
Db 1091 -----LFSQLYLPFSNKEYEISMLNQMSLWMLKTASIELRVT---SLNRQSHRTORLL 1140
Qy 1067 -----LKKFS-----IEKRFAYWSGY----- 1082
Db 1141 HLLDDMPVKYSDBEGGIEDENRSVGLFHPDTATKVRKILNILDIDFSQBIPEPLQ 1200
Qy 1083 -----VKSL-AVHVAETEG-----SSCT 1099
Db 1201 LDFPDRAQIEQVIANCEHKNLRGQTCNVKLLHRVLVAEVALQGMAGIQRPLMBEIS 1260
Qy 1100 SLLEY-----QMLVSAWRML--LIATTHADIMHITD-SVVRRLQFLDV-- 1140
Db 1261 TVLVYVGRNKLQCLHAKRAHLESWRQLEIITACPDQILQAEADROLIIRDILOVDH 1320
Qy 1141 --LQGTALLAVPASVNCRLGSMKCTLLLLLRQWKBELGSVDILGP----- 1187
Db 1321 KILDDAAQLMPVVAGA--VFTLTAHLSQAVLTEQKQ-----TSVLGPABAHYAFMLDS 1373
Qy 1188 -----LPEILEGVLDQDQQLMERTKAKVFSAFITVLQMK 1221
Db 1374 CFTSPPEENPLVGFASIGDSSLYILKLLDFILKTGGG--FQVRTHLYGSLLYYLQIA 1432
Qy 1222 E-----MKVSDIPQVSQLVL--NVCETLQEBVALPDQTRHSLALGSATED---KDSM 1269
Db 1433 QRPEPDPTLEAAKKTWERTAPEDVFSKLQRENIATIE-----SYGAALMEVVCRDAC 1486
Qy 1270 ETDDCSRRHQRDQGVCLGHAKELCEVDEGDSMLQVTRRLPIPLTLLTLEVSRLR 1329
Db 1487 DGHEIGR-----MLALALDRIVSVDKQ--QWLLLYLSNGYLKVLVDSLVEDDR 1534
Qy 1330 MKQN-----LHPTETALHLLLTARTQOGATAVAGAGITQSIICPLLSVYQLST 1378
Db 1535 TLQSLITPQPLLKALYTESKMAFLTRVAKIQQGALELLRSGVI--VRLAQCCQYDNRP 1592
Qy 1379 NGTAQTPSASR--KSLDAPSWPGVRLSMLEBOLLKTLRYNLPALDFVG-----VHQ 1431
Db 1593 ETDQSMEGMRDPPMFIPTPDRYRQILLPALQQLCVILTSSMAQHLQAQGVQLQFLISH 1652
Qy 1432 ERTLQCLNAVTVQSLACLEADHTVGPILQLSNFMKEMHFLPOLMR--DIQVNLGYLC 1489
Db 1653 SDTIQAILRCQDV--SAGSLQELALLTGTISKAA-----LPGILSELVDVNEGSLM 1702
Qy 1490 Q-----ACTSLIH--SRKWLQHYLQNKNGDGLPSAVAQVRQRPSSAASAPSS 1535
Db 1703 ELQHGIRFQRCQLGLLRSFGSDRLRFKQDDNVEG-----DKV 1743
Qy 1536 SKQPAADTEASEQALHTVQYGLKILSKTLAALRHFTPDVCQILLDQSLDAEYNFLFA 1595
Db 1744 SKKDIEL-AMQOICANWMEY-----CQSLMLQS-----SPTFOHA 1778
Qy 1596 LSFTHPTFDSEV-----APSFGTLLATVNVALN-----MLG 1626
Db 1779 VCLFPTPSLSETNRDGRQDTPQAPVVPYVWRLPGLGIITLLYKQSANDFFSYVDSHQSVS 1838
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Qy 1627 EL-----DKKKEPLTQAV-----GLSTQAE-----GTRTLKSLMLMFTM 1659
Db 1839 KLQNVQOLPPDEIKE--LCQSVMPAGVDKISTAQKSVLARRRLRVKVINNAKLLSLCSPFI 1897
Qy 1660 ENCPYLLISQAMRYLRDPAVH--PRDKQRMQELSSSELSTLLSSLSRVFRRGAPSSPATG 1717
Db 1998 ETCLFILL--WHLEYLLHCHWPTDSQ-----DSLFASTLFLKSRRLQDPSAS- 1942
Qy 1718 VLSPSQOKSTSL---SKASPESQEPILQL-----VOAFVRHMQR 1753
Db 1943 -----ETNLDPRSGLAIVSQHDLQLOQADAINAFGESLOK 1977

RESULT 7
US-60-701-038-306
; Sequence 306, Application US/60701038
; GENERAL INFORMATION:
; APPLICANT: JOSELOFF, Elizabeth et al.
; TITLE OF INVENTION: KIDNEY DISEASE TARGETS AND USES THEREOF
; FILE REFERENCE: C1001616
; CURRENT APPLICATION NUMBER: US/60701,038
; CURRENT FILING DATE: 2005-07-21
; NUMBER OF SEQ ID NOS: 1828
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 306
; LENGTH: 2013
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-701-038-306

Query Match 3.2%; Score 292.5; DB 8; Length 2013;
Best Local Similarity 18.9%; Pred. No. 7.2e-13;
Matches 416; Conservative 303; Mismatches 743; Indels 741; Gaps 104;

Qy 41 NKHRRLLLEG-----LSYK--PPSPSSAEKV-KANKDVASPLKELGR- 81
Db 26 NALWRQPEAVHLLDKILKHKPDIISLFKNPPKNNVQOHEKVKQASTEGVIAIQGGTRL 85
Qy 82 -----ISKFLGLDBEQSVQLLQC--YLQEDYRG--TRDSVKTVLQDERSQALIL 127
Db 86 LPEQLIKEAFTLSDLFDIGELAAVELLLAGHQHPHGLTRGLVAVLL----- 134
Qy 128 KIADYVEERTCIURCVLHLL-----TYQDERHPYRVEYADCV 167
Db 135 -----YWDGKRCIANSLKALIQSRGKTWTLELSPELASMTTRFTDELMEOGLTYKVL- 188
Qy 168 KLEKELYSK--YRQOFELKYTEAPTETHGNLMTNRQVSRWFVQCLREQSMLEIIFLY 225
Db 189 -----LVSQIDVNNFEKIQERGLGSEKH-----RKEVSLIKEC---RQSLAESLPAW 235
Qy 226 YAYFEMAPSULLVLTQMFKEQGFSGSRQTRNRLHVDETMDP--FVDRIGYFSALILVEGMDI 283
Db 236 ACQSPILGKEDTLALI-----GHLEVRTVEANGSLDAVNLALLMALLYCFDI 281
Qy 284 -----ESLHKCALDDRRE-----LHQFAQGLICQMDCLMLTGFDPH-HAPVL 327
Db 282 SFIEQSTEERDDMTLQPLLTEKQYIATIHSLRQDSQLWK-----LPGLOATVR 330
Qy 328 LAWALLRHNLN--PE-----ETSSVVRKIGCTATQNLNVFYLTTRILQSLASGGNDCTTST 380
Db 331 LAWALARGISQLPDVTALAEFTDEADMAELADNVFLF--LMESVVVSEFYQBEF 387
Qy 381 ACMCVYGLLS--FVLTSLELHTLGNQOD-----IIDTACEVLADPSLP----- 421
Db 388 YIRRVHNLITDFALMPMKVKQLNRADDEDARMHMSMQMNEPPISLRRDLHMLLIG 447
Qy 422 -----ELFWGTEPT-----SGLG-----IILDSVCGMF-----P 445
Db 448 ELYKKNPHELEALEYWCPTPLQTTPTIMGSYLVGAHQRPQRPQVSLKFKVRQMGDLPLP 507
Qy 446 HLLSPILLOLLBALVSGSKTAKKYVSLDKMSFYNELYKHKPHDVISHEDGTLWRRQTKL 505
Db 508 TIYIPYLMQLOGLANGPOCAHYCFSL----- 534
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QY 226 YAYFEMAPSDLLVLTQMFKEQFGSGRQTRNHLVDETMDP--FVDRIGYFSALILVEGMDI 283
D 236 ACQSPGKEDTLLI-----GHLERVTEANGSLDAVNALLMALLYCPDI 281
QY 284 -----ESLHKCALDRRE--LHQPAQGLICQMDCLMTFGDIPH-HAPVL 327
D 282 SFIEQSTEERDMHOLPTEKQYIATIHSLRQDSQWLK-----LPGLOATVR 330
QY 328 LAWALLRHTLN--PE-----ETSSVVRKIGGTAGIQLNVFOYVLTLLQSLASGGNDCTTST 380
D 331 LAWALALRGISQLPDVTALAHFTEDEMAELIADNVFLP---LMSVVVSEFYQBEF 387
QY 381 ACMCVYGLLS--FVLTSLEHTLGNQOD-----IIDTACEVLADPSLP----- 421
D 388 YIRRVHNLITDPLALMPKVKQLRNRADEADARMHMSQMGNPEPISLRRDLHMLLIG 447
QY 422 -----ELFWGTPT-----SGLG-----IILDSVCGMP-----P 445
D 448 BLYKKNPFHLEALFYWCPTPLQPTPTMGSYLGVAHQRPQORQVVLKSFVRQMGDLPLP 507
QY 446 HLLSPQLLQALVSGKSTAKVYSFLDKMSPYNELYKHKPHDVISHEDGTLWRRQPKL 505
D 508 TIYPYLKMLQGLANGPOCAHYCFSL----- 534
QY 506 LYPGLGGOTNLRIPOGTGVQVMDLDRAYLVRWEYSYSSWTLFTCEIEMLLHVSTADVIQH 565
D 535 --KVGSSSHVENIQAGGSP-----VSMHPHSLMLYH-----EHLRKDLPSADSVOY 581
QY 566 CORVKPIIDLHVHVIJSTOLSTADCLLPITSRIYMLLQ--RLTUVISP---PVDVITASCVN 620
D 582 --RHLPSSRGITQK--EODGLIA--FLQTTSTIITWSENARLALCEHPQWTPVTVVLGLLQ 635
QY 621 C-----LTVLAA--RNP--AKWTDLRHGTLPFVAHPVSSLSQMSIABGMNAG 665
D 636 CSIPPLVKAELTKLTAFAKSPHIAASLWQSLYEQILOTRIPSORQAIGIEV----- 690
QY 666 GVGNLMMNSEOPQEGYGVYTIAPFLITLVKQGLSTQSGI-----VPCVMFVLKEMLP 720
D 691 -----LNEISRECEYPLTRAFQCLISTIVESSFNSLGNAGLRPPGDFPLQFLRDSVFL 745
QY 721 SYHKWRYNHSGVREGICLIELIHAILNLCHETDLHSHTPSL-----QFLCTICS--L 772
D 746 RFRTRAYRAAKWEVAEVLVEFVKLLR-----DYEPQLDEFDVDFVELQGBEII 796
QY 773 AYTEAG-----QTVINIMIGVDTIDMWAAOPRSDGAGCQGLIKTV 818
D 797 AYKPPGFLMYHLNLNESPMLELALSLEBEGVKQLD--TYAPPGKKHLEKAVOHCIALNL 855
QY 819 KL-AFSTNNVIRLPPSNVWSPLQAL---SOHGAHGNLJAVLAKYIYHKHDPALPRL 874
D 856 TLOKENLMDLLRESQALIVCPLEQLLOGINPRTKADNVNI--ARVLYHGN--TNPEL 912
QY 875 AIQLKLRIATVAPMS-----VYACLGNDAAA--IRDAFLTRL 909
D 913 APESAKILCCISCNSNIQIKLVGDFTHQDSIQSKLMAGFVECLDCEDAEFVRLBEGSEL 972
QY 910 QSKIEDMR--IKVMILEFTVAVEFQPGJELF--LNLEVKDSDGSKFSLGMW---SC 962
D 973 EKKUVAIRHETRIHNLITSLCENPPNLALYLGFLKPKVSTINLQDPVLCGPRTIC 1032
QY 963 LHAVLELDSQQODRYWCYPPLLHRAAIAFLHALWQ-----DRRDSAMLVLRTPKPF 1013
D 1033 LHAILEKGTGEGR--TCPVAVRESPLQALCYQVIYQLCACSDTSQGTWYELATSDQF 1090
QY 1014 WENLSPFLGTLS--PPSSTS--EPSILETCALIMKIICLEIYVYVKGSLDQSLKOT---- 1066
D 1091 -----LFSQQLYLPFSNKEYEISMLNQMMLKMTASTELRVT---SLNRQSRHTORIL 1140
QY 1067 -----LKKFS-----IEKFAWNGY----- 1082
D 1141 HLLDDMPVKPYSGEGGIEDENRVSGLFHFTATKVRKILNTILDSIDFSQEIPELQ 1200

QY 1083 -----VKSL-AHVVAETEG-----SSCT 1099
D 1201 LDFFDRAQIEQVIANCEHKNLRGQTCNVKGLHVLVAEVALQMAAGORPLLMERIS 1260
QY 1100 SLLEY-----QMLVSAWRML--LIITATTHADIMHLD--SVVRRLQFLDV-- 1140
D 1261 TVLQTVVGRNKLQCLHAKRHLESWRLVBIILITACQDILIQADREQLIIRDILOQDHD 1320
QY 1141 --LDGTKALLVAPSVNCLRGSMKCTLLILLRLQWKRELSGVDBILQP----- 1187
D 1321 KILDERAQAELMPVAVAGA--VFTLTAHLSQAVLTEQKQ-----TSVLGFAEHAHYAFLDS 1373
QY 1188 -----LTEIIEGVLAQDQQLMEKTKAKVFSAFITVLQMK 1221
D 1374 CFTSPPEENPLVGFASIGDSSLYILKKLIDFLIKTGG--FORVTRHLSGLLYLOIA 1432
QY 1222 E-----MKYSIDIPQYSQVL--NVCETLQEEVIALPDQTRHLSALGSATED---KDSM 1269
D 1433 QRPDEPTLEAAKKTMMERLUTAPEDVFSKLQRENIAIIE-----SYGAALMEVVCRDAC 1486
QY 1270 ETDCSRSHRDQRDQVGVCLGLHLAKELCEVDEGDSWLVQVTRRPLIPTLLTTLEVSUR 1329
D 1487 DGHEIGR-----MLALALLDRIVSDKQ--QOMLLYLSNSGYLKVLVDSLVEDDR 1534
QY 1330 MKQN-----LHFEATLHLLLTARTQOGATAVAGAGITQSIICLPLSVYQLST 1378
D 1535 TLOSLITPQPLLKALYTESKMAFLTRVAKIQOGALELLRSQVI--VRLAQCYVYDRP 1592
QY 1379 NGTAQTPSASR--KSIDAPSWFVYRLSMLMEQLLKTLYNPLPALDFVG-----VHQ 1431
D 1593 ETDQSMFGMDPPMFTPTVDYRQIILLPALQCOVILTSSMAHQLOAAGVLOFLISH 1652
QY 1432 ERTLOCLNAVRTVOSLACLEADHTVGFILQLSNPMKEMHFLPOLMR--DIOVNLGYLC 1489
D 1653 SDTIOAILRCQDV--SAGSLQELALLTGII SKAA-----LPGILSELDVDVNEGSLM 1702
QY 1490 Q-----ACTSLH-----SRKOLHYLQNKNGDGLPSAVALQVQRPSPAASAPSS 1535
D 1703 ELQGHIGRFORQCLGLLRFSGSDRLQRFKQDDNVEG-----DKV 1743
QY 1536 SKQPAADTEASEQALHTVQYGLLKLKSLTALAHRHFTPDVCQIILDOSLDLAEYFLPA 1595
D 1744 SKQDIEL-AMQOICANWNEY-----CQSLMLQS-----SFTFOHA 1778
QY 1596 LSFTTPTDSEV-----APSGTLLATVNALN-----MLG 1626
D 1779 VCLFPTSELSETVNRDGPQDTQAPVVPYWRUPGLGIIYLLKQSANDFSYVDYSHRQSVS 1838
QY 1627 EL-----DKKKEPLTOAV-----GLSTQAE-----GTRTLKSLLMFTM 1659
D 1839 KLQNVQELPPDEIKE--LCQSVMPAGVDKISTAQKYVLARRRLVKVNNRAKLKSLCSFTI 1897
QY 1660 ENCFVLLISQAMRYLRDPAVH--PRDKORMQKSELSELSTLSSLSRYFRRCGAPSSPATG 1717
D 1898 ETCLFIL--WRHLEYILLHCHMPDSQ-----DSLPASTRILFKSRLQDSFAS- 1942
QY 1718 VLPSQPGKSTSL--SKASPESQEPLIQL-----VOAFVRHMQR 1753
D 1943 -----ETNLDPSGLAIVSQHDLQLOADAINAFGESLQK 1977

RESULT 9

US-60-717-196-498
; Sequence 498, Application US/60717196
; GENERAL INFORMATION:
; APPLICANT: Mehdi MESRI et al.
; TITLE OF INVENTION: STOMACH DISEASE TARGETS AND USES THEREOF
; FILE REFERENCE: CLO01631
; CURRENT APPLICATION NUMBER: US/60/717,196
; CURRENT FILING DATE: 2005-09-16
; NUMBER OF SEQ ID NOS: 2826
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 498

Db 1839 KQNVQELPPDEIKE-LQCSVMPAGVDKISTAQYVTLARRELKVINNRKLLSLCSFII 1897
Qy 1660 ENCFYLLISQAMRYLRDPVAVH--PRDKQRMKQELSSSELSTLLSSLSRYFRGAPSSPATG 1717
Db 1898 ETCJFII---WRHLEYLLHCHMTDSQ-----DSLPAKRTLFKSRRLQDSFAS- 1942
Qy 1718 VLPSFOGKSTSL---SKASPESQBPFIQL---VQAFVRHMQR 1753
Db 1943 -----ETNLDLFRSGLAIVSQHDLQDQADAINAFGESIQK 1977

RESULT 10
US-60-664-936-323
; Sequence 323, Application US/60664936
; GENERAL INFORMATION:
; APPLICANT: JOSELOFF, Elizabeth et al.
; TITLE OF INVENTION: KIDNEY DISEASE TARGETS AND USES THEREOF
; FILE REFERENCE: CLO01591
; CURRENT APPLICATION NUMBER: US/60/664,936
; CURRENT FILING DATE: 2005-03-25
; NUMBER OF SEQ ID NOS: 2456
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 323
; LENGTH: 2014
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-664-936-323

Query Match 3.2%; Score 292.5; DB 8; Length 2014;
Best Local Similarity 18.9%; Pred. No. 7.2e-13;
Matches 417; Conservative 302; Mismatches 745; Indels 739; Gaps 104;

Qy 41 NKWRRLLLEG-----LSYK--PPSPSSAEKV-KANKDVASPLKELGLR- 81
Db 26 NALWRRPEAVHLLDKILKXGKPFISLFKPPKPVNQHEKQVQKASTEGVAIQGGGRL 85
Qy 82 -----ISKPLGIDBQSVQLQC--YLQEDYRG--TRDSVKTVLQDEROSQALIL 127
Db 86 LPEQLIKEAFILSDLFDIGELAAVELLLAGEHQHPFGPLTRGLVAVLL----- 134
Qy 128 KIADYVEERTCILRCVLHLL-----TYFODERHPYRVEYADCVD 167
Db 135 -----YWDKRCIANSLKALIQSRGKTWLTLSPELASMTTFTDELMEQGLTYKVL- 188
Qy 168 KLELUSK--YRQOPELYKTEAPTETHGNLMTERQVSRFVQCLREQSMLLEIFLY 225
Db 189 -----LVSQIDVNNFEKLOREGLGSEKH--RKEARVSDLIKEC---RQSLAESLPAW 237
Qy 236 YAYFEMAPSDLLVLTMPKFGSGRQTRNHLVDETMDP--FVDRIGYFSALILVEGMDI 283
Db 238 ACQSPKGEDTILLI-----GHLERVTVANGSLDANVALLMALLYCFDI 283
Qy 284 -----ESLHKCALDRRE--LHQPAQDGLICQDMDCMLMTFGDIPH-HAPVL 327
Db 284 SFIEQSTEERDDMIHQLPLTEKQYIATIHRSRQDSQLWK-----LPGLQATVR 332
Qy 328 LAWALLRHTLN--PE-----ETSSVVRKIGGTAIGLNQVYLTIRLLQSLASGNDCTTST 380
Db 333 LAWALALRGISQLPDVPTALAEFTEADEAMALAIADNVFLF---LMESVVVSEYFYQBEF 389
Qy 381 ACMCVYGLLS--FVLTSLELHTLGHQD-----IITACEVLADPSLP----- 421
Db 390 YIRRVHNLITFDLAMPKVKQKLRNRADEDARMIHMSQMGNEPISLRDLHLMILIG 449
Qy 422 -----ELFMGTPT-----SGLG-----IILDSVCGMF-----P 445
Db 450 ELYKKNPFFHLEALEVWCPTFELQPTTIMSYLGAHQRPQORQVVLKSFVQMGDLPP 509
Qy 446 HLLSPQLQLRALVSGSKTAKKVYFLDKMSFYNELYKHKPHDVISHEDGTLWRRQTKL 505
Db 510 TIYIPYKWLQLANGPOCAHYCFSL----- 536

Qy 506 LYPGGQTNLRIPQGTGQVQVMDRAVLRWEYSYSSWTFTCEIEMLLHVSTADVIQH 565
Db 537 --KVGSSHVENIIOGAGSP-----VSWEHFFHSLMLYH---EHLRKOLPSADSQY 583
Qy 566 QORVKPIIDLHVHVIKISTDLSTADCLLPITTSRIYMLQ--RLTTVISP---PVDVIASCVN 620
Db 584 --RHLPSRGITQK--EODGLIA--FLOJTSYIIITWSENARLALCEHPQWTPVVLIGLLO 637
Qy 621 C-----LTVLAA--RNP-----AKVWTDLRHTGFLPFAHPVSSLSQMSIAEGMAG 665
Db 638 CSIPPLKABELLKTAAAFGKSPETAAASLWQSLEVYQILQTVRIPSORQAIQIEVE----- 692
Qy 666 GYGNLMMNSEPOQGEYGVTTAFRLITLTVKQGLGSTOSQGL-----VPCVMFVLEKMLP 720
Db 693 -----LNEIESRCEEYPLTRAFCOLISTLVESSPFSNLGAGLRPPGFYLOFLRDSVFL 747
Qy 721 SYHKWRYNSHGVRQIOGICLILELHAILNLCHETDLHSSHTPSL-----QFLCICS--L 772
Db 748 RFRTRATRAAEKWEVAEVLEVYKLLR-----DYEPQLEDVDFVQFVELOGEBII 798
Qy 773 AYTEAG-----QTVINIMIGIVDTIDMVMAAQPRSDGAGQGGQGLLIKTIV 818
Db 799 AYKPPGSLMYHLLNESPMLLELALLSLEEGVKQLD-TYAPPPGKXKLEKAVQHCIALLNL 857
Qy 819 KL-AFSTVNNVIRLKPPSNVVSLEQAL---SQHAGHGNLIJAVLAKYIYHKKDPAIPRL 874
Db 858 TLQENLFMDLLRESQALIVCPLEQLQGINPRTKADNVVNI--ARYLYHGN--TNPEL 914
Qy 875 AIQLLKRLATVAPMS-----VYACLGNDAAA--IRDAFLTRL 909
Db 915 AFESAKILCCISCNSNTQIKLVGPTHQDSISQKLMAGFVECLDCEDEEFVLEEGSEL 974
Qy 910 QSKIEDMR--IKVMILBEPLTAVETQPGLIELF--LNLEVKDGDGSKFSLGMW----SC 962
Db 975 EKKLVAIRHETRIHLLNLLITSLCNPNNALYLLGFELKPKVSTTNLQDPGLCPRTC 1034
Qy 963 LHAVLELDSQOQDRYWCYCPPLHRAAIAFLHALWQ-----DRRSAMLVLTCKPF 1013
Db 1035 LHAILNILEKTEGR--TGPVAVRESQALBQELQVYIYQLCACSDTSQPTMYRLTSQDF 1092
Qy 1014 WENLTSPLFGTLS--PSETS--EPSILETCALIMKIICLEIYVYVKGSLDOSLKT---- 1066
Db 1093 -----LFSQLOVLPFSNKEYEISMLNQMSWLMKTASIEURVT---SLNRORSHTORLL 1142
Qy 1067 -----LKKFS-----IEKRFAYWSGY----- 1082
Db 1143 HLLDDMPVKYSDGEGGIEDENRSVSGFLHFDATKVRKILNLTDSIDFSQEIPELQ 1202
Qy 1083 -----VKSL-AVHVAETEG-----SSCT 1099
Db 1203 LDFDRAQIEQVIANCEHKNLRGQTVCNVKKLHRVLVAEVALQMAAIGQRPLLMEIS 1262
Qy 1100 SLLEY-----QMLVSAWML--LIATTHADIMHLD--SVVRQLFDV-- 1140
Db 1263 TVLQYVGRNKLLOCLHAKRHALESWROLVEIILTACPDLLQASDRQLIIRDILOQVHD 1322
Qy 1141 --LDGTKALLVPASVNCRLGSMKCTLLILLRQWKEGSLGSDVEILGP----- 1187
Db 1323 KILDEAAQELMPVVAGA--VFTLTAHLSQAVLFEKQK-----TSVLGPAEAHYAFMLDS 1375
Qy 1188 -----LPEILEGVLAQOQLMKTKAKVFSFIVTLQMK 1221
Db 1376 CFTSPPEENPLVGFASIGDSLYIILKKLLDFILKTGG--FQVRTHLYGLSLLYLOIA 1434
Qy 1222 E-----MKVSDIPQYSQVL--NVCETIQEEVIALFDOTRHSALGASATED---KQSM 1269
Db 1435 QRPDEPDTLEAAKKTMMERLTAPEDVFSKLORENATIIIE-----SYGAALMEVVCRDAC 1488
Qy 1270 ETDDCSRRHRDQRDQGVCLGLHLAKELCEVDEGDSMLQVTRRLPIPLTLTLEVSUR 1329
Db 1489 DGHEIGR-----MLALALLDRIVSVUDKQ--QQMLLYLSNSGYLKLVDLSIVEDDR 1536
Qy 1330 MKQN-----LHFEATLHLLTLARTQOGATAVAGAGITQSCICLPLLSYQLST 1378

Db 1537 TLQSLTTPQPLKALYTESKAFTRVAKIQGAELELLRSQVI--VRLAQOQVYDMRP 1594
QY 1379 NGTAQTPSAR-KSLDAPSWPGYVRLSMSLMEQLLTKLYRNFPEALDFVG-----VHQ 1431
Db 1595 ETDQSMFGMRDPPMFIPTVDYRQIQLPALQCVILTSSMAOHLQAAGVQLQFLISH 1654
QY 1432 ERTLOCLNAVRTVQSACLAEADHTVGFILQLSNFMKEWHFHLPLQMLR--DIQVNLGYLC 1489
Db 1655 SDTIQAILRCQDV-SAGSIQELALTLGIISKAA-----LPGILSELVDVDVNGSLM 1704
QY 1490 Q-----ACTSLH-----SRKMLQHYLQNKNGDGLPSAVAQVRORPPSAASAAPS 1535
Db 1705 ELQGHIGRFQRCGLLREGGSDRLRQFKQFDNVEG-----DKV 1745
QY 1536 SKQPAADTASEQOALHTVQYGLLKILSKTLAALRHFTPDVQCILLDDQSLDLAENFLFA 1595
Db 1746 SKKDEIEL-AMQOICANVMEY-----COSLMLOS-----SPTFQHA 1780
QY 1596 LSPFTTTFDSEV-----APSGFTLLATVNVALN-----MLG 1626
Db 1781 VCLFTFSLSETVNRDGRQDQAPVYVWRLPGLGIIYLLKQSANDFPSYDHSRQSVS 1840
QY 1627 EL-----DKKKEPLTQAV-----GLSTQAE-----GRTTLKSLLMFTM 1659
Db 1841 KLQNVQELPDEIKE-LCQSVMPAGVDKISTAQKYVLARRRLVKVINNRKALLSLCSFII 1899
QY 1660 ENCFYLLISQMYRLDPAVH--PROKQMKQBELSELSTLLSSLSRYFRGAPSPATG 1717
Db 1900 ETCFLFIL--WRHLEYLLHCFMPTDSQ-----DSLFSRTLFKSRRLLQDSFAS- 1944
QY 1718 VLPSPQKSTSL--SKASPESQBLIQL--VOAFVRHMOR 1753
Db 1945 -----ETNLDFRSGLAIVSOHDLQDQADAINAFGESLQK 1979

RESULT 11

US-60-701-038-308
; Sequence 308, Application US/60701038
; GENERAL INFORMATION:
; APPLICANT: JOSELOFF, Elizabeth et al.
; TITLE OF INVENTION: KIDNEY DISEASE TARGETS AND USES THEREOF
; FILE REFERENCE: CL001616
; CURRENT APPLICATION NUMBER: US/60/701,038
; CURRENT FILING DATE: 2005-07-21
; NUMBER OF SEQ ID NOS: 1828
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 308
; LENGTH: 2015
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-701-038-308

Query Match 3.2%; Score 292.5; DB 8; Length 2015;
Best Local Similarity 18.9%; Pred. No. 7.2e-13;
Matches 417; Conservative 302; Mismatches 745; Indels 739; Gaps 104;
QY 41 NKHWRLLEG-----LSYK--PPSPSSABKV-KANKDVASPLKELGLR- 81
Db 26 NALWRRQPEAVHLDDKILKKHKDPDFISLFKNPPKNVQOHEKVQKASTEGVAIQOQOQTRL 85
QY 82 -----ISKFLGLDEQSVOLLQO--YLQEDYRG--TRDSVKTVLQDERQSQUALIL 127
Db 86 LPQLIKEAFILSDLDIGELAAVELLLAGEHQOHPHPPGLTRGLVALL----- 134
QY 128 KIADYVEERTCILRCVLHLL-----TYFODERHPYRYEYADCDV 167
Db 135 -----YWDGKRCIANSUKALIQSRGKTWTLLESPELASMTTFTDELMEQGLTYKVLT- 188
QY 168 KLEKELVSK--YRQOFEELYKTAPTWETHGNLMTERQSRWFVQCLREOSMLELIFLY 225
Db 189 -----LVSQDVNNEFKLQRLGRGLGSEKH---RKEARVSDLIKEC---RQSLAESLFAW 237

QY 226 YAYFEMAPSDLLVLTQMFKEQOFGSGRQTNRHVLVDEMDP--FVDRIGYFSALIVBGMDI 283
Db 238 ACQSPGKEDTLLI-----GHLERVTEANGSLDAVNALLMALLYCFDI 283
QY 284 -----SSLHKCALDDRR-----LHQFAQDGLICQDMDCMLMTTGDIPH-HAPVL 327
Db 284 SFTQOSTERDDMIHQLPLLTETKQYIATIHSLRLQDSQWK-----LFGLOATVR 332
QY 328 LAWALLRHTLN--PE-----ETSSVVRKIGGTAIQIANVFOYLTRLQLQSLASGNGDCTTST 380
Db 333 LAWALAALRGISQLPDVTALAEFTEDAEAMAEIAADNVFLF--LMESVVVSEFYQEEF 389
QY 381 ACMCVYGLLS--FVLTSLHLTLGNQD---IIDTACEVLADPSLP----- 421
Db 390 YIRRVENLITDFLALMPMKVKQLRNRADEDARMHMSMQMGNEPPISLRDLHLMLLIG 449
QY 422 -----ELFWGTEPT-----SGLG-----IILDSVCGMF-----P 445
Db 450 ELYKKNPFHLEALEYWCPTPLQPTPTIMSGVLAHQRPQKQVVLKFRVQMGDLLPP 509
QY 446 HLLSPLLQLLRALVSGSKTAKKVYSPFLDKMSFYNELYKHKPHDVISHEDECTLWRRQTPKL 505
Db 510 TYIPIYKMLQGLANGPOCAHYCFSLL----- 536
QY 506 LYPLGQOTNLRIPOQTVGQVMDLDRAYLVRYWEYSYSWTLFTCEIEMLLHVVSTADVIQH 565
Db 537 --KVGSSHVENIQAGGSP-----VSWEHFPHSLMLYH--EHLRKDLPSADSVOY 583
QY 566 CORVKPIIDLHVKVISTDLSIADCLLPITSRIMLLO--RLTTVISP--PVDVIASCVN 620
Db 584 --RHLPSRGITQK--BQDGLIA--FLQLTSTIITWSENARLALCEHPQWTPVVVILGLLQ 637
QY 621 C-----LTVLAA--RNP--AKVWTDLRHTGFLPFVAPVPSVLSQMSIAEGNAG 665
Db 638 CSIPPVVKAECLKTLAAGKSPFIAASLMQSLLEYTQIOTVRIPSORAIGIYE----- 682
QY 666 GYGNLLMNSEPOQOGEYGVTTIAFLRLITLTVKGOLGSTQOGL-----VPCWFMVLKEMLP 720
Db 693 -----LNEIESRCEEYPLTRAFCOLLISTLVESFSPNLGAGLRPPGDPYVLQFLRDSVFL 747
QY 721 SYHKWRYNSHGVREQIGCILELIHAILNLCHETDLHSSHTPSL-----QFLCICS--L 772
Db 748 RFRTRAYRAAEKWEVAEVLEVYFKLLR-----DYPEQLEDVDFQFVLEQGEI 798
QY 773 AXTEAG-----OTVINIMGIGVDTIDMVMAAQPRSDGAEGOGQOLIKTV 818
Db 799 AYKPPGFSLMYHLLNESPMLLEALSLEEGVKOLD-TYAPFGKKHLEKAVQHCLALLNL 857
QY 819 KL-AFVSVTNNVIRLKPPSNVWSPLEQAL---SQHGAHGNLLIAVLAKYIYHKHDPALPRL 874
Db 858 TLQKENLFMDLLRESQALIVCFLEQLLOGINPRTKKADNVVNI-ARYLYHGN--TNPEL 914
QY 875 ALOLLKRLATVAPMS-----VYACLGNDAAA--IRDAFLTRL 909
Db 915 AFESAKILCCISCNISIQIKLVGDFTHDOSISQKLMAGFVECLDCDAEAFVLEBSEL 974
QY 910 OSKIEDMR--IKVMILEFLTVAVETOPGLIELF-LNLEVKDGDGSKFESLGMW-----SC 962
Db 975 EKKLVAIRHETRIHILNLITSLECNPPNIALYLLGFELKKPVSTNLQDPGVLCGPTC 1034
QY 963 LHAVLELIDSOQDRYWCPCPLLHRAAIAFLHALWQ-----DRRDSAMLVLRTPKF 1013
Db 1035 LHAILNILEKTEGR--TGPVAVRESPQALAEVCQVIYQLCACSDTSGPTMYRLRTSQDF 1092
QY 1014 WENLTSPLFGTSL--PPSETS--EPSILETCALIMKILCIIEIYVVKVGLSDQSLKDT---- 1066
Db 1093 -----LFSQLOYPFSNKEYEISMNLQMSWLMKMTASIELRVT---SLNRQSRHTQRL 1142
QY 1067 -----LKKFS-----TEKRFAYWVG----- 1082
Db 1143 HLLDDMPVKPYSDGGEGGIEDENRSVGFHFTATKVRKILNILDIDFSQEIPEPLQ 1202
QY 1083 -----VKSL-AVHVAETEG-----SSCT 1099

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Db 1203 LDFFDRAIEQVIANCEHKNLRGQTVCNVLLHRLVLAENVALQGMAAIGORPILMERIS 1262
Qy 1100 SLLEY-----OMLVSAWRL--LITATTHADIMHLD--SVVRQLFLDV-- 1140
Db 1263 TVLQTVGVRKNLQCLHAKRHAEWSRQLVEIILTACQODLIQAEEDRLIIRDILOVDHD 1322
Qy 1141 --LDGTKALLVPASVNCIRLGSMKCTILLILLRQMKRELGSVDILGP----- 1187
Db 1323 KILDEAAQELMPVVAGA--VFTLTAHLSQAVLTEQK-----TSVLPAEAEHAFMLDS 1375
Qy 1188 -----LTELGVLDQAOQOLMEKTKAVKVFSAFIVLQMK 1221
Db 1376 CFTSPPEENPLVGSPASGDSLSYILKKLLDFILKTCGG--FORVRTHLYGSLLYLQIA 1434
Qy 1222 E-----MKVSDIPOYSQVLV--NVCETLQEBEVIALFDQTRHSLALGSATED---KDSM 1269
Db 1435 QRPDEPTLEAAKKTWRELTAPEVDFSKLQENIAIIE-----SYGAALMEVVCRDAC 1498
Qy 1270 ETDDCSRSHRDQDGVCLGLHLAKELCEVDEGDSWLVQVTRRLPIPLTLLTLEVSLR 1329
Db 1489 DGHEIGR-----MLALALDRIVSDKQ--QOMLLYLSNSGYLKVLDVSLVEDDR 1536
Qy 1330-MKQN-----LHTEATLHLLTLARTQCATAVAGITQSCICLPLSVYQLST 1378
Db 1537 TLQSLLTQPPLLKALYTESKMAFLTRVAKIQQGALELLRSGVI--VRLAQCVQYDMRP 1594
Qy 1379 NGTAQTPSASR--KSLDAPSWPGVYRSLMSLEQLLTKRYNLFPEALDFVG-----VHQ 1431
Db 1595 ETDPOSFMGMDPPNFITPVDYRIQIILLPALQCVILTSMAQLQAQGVQLFLISH 1654
Qy 1432 ERTLQCLNAVTVQSLACLEADHTVGFILQISNFMKEWHFHPQLMR--DIQVNLGYLC 1489
Db 1655 SDTIOAILRCQDV-SAGSLQELALLTGIIKAA-----LPGILSELVDVNEGSLM 1704
Qy 1490 Q-----ACTSLH--SRKMLQHYLQNKNGDGLPSNAQVORPPSAASAAPSS 1535
Db 1705 BLOGHIGRFQRCGLLSRFGSDRLQFKFODDNVEG-----DKV 1745
Qy 1536 SKQPAADTEASQQAHLTVQGLLKILSKTLAALRHFTPDVCOILLQSLDLAEYNELFA 1595
Db 1746 SKKDIEL-AMQOICANWEY-----CQSLMQS-----SPTFOHA 1780
Qy 1596 LSFTPTPTDSEV-----APSGFTLLATVNVNVLN-----MLG 1626
Db 1781 VCLFTPSLSETVNRDGPQDTPQAPVVPYWRLLPGLGIIYLLKQSANDFFSYDHSRQSVS 1840
Qy 1627 EL-----DKKKEPLTOAV-----GLSTQAE-----GTRTLKLSLLMTFM 1659
Db 1841 KLQNVQEQLPPDEIKE--LQSVMPAGVDKISTAQKYVLARRRLVKVINNRKLLSLCSPII 1899
Qy 1660 ENCFVLLISQAMRYLRDPVAV--PRDKQRMKQELSELSTLSSLSRYFRRGAPSSPATG 1717
Db 1900 ETCFLFIL-----WRHLEYLLHCHMPTDSQ-----DSLPAKTLFKSKRLQDSFAS- 1944
Qy 1718 VLPSPOGKSTSL---SKASPSEQELIQL-----VQAFVRHMQR 1753
Db 1945 -----ETNLDPRFSLAIVSQHDLQLOADAINAFGESLQK 1979
```

RESULT 12

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US-60-717-251-663.
; Sequence 663, Application US/60717251
; GENERAL INFORMATION:
; APPLICANT: Steven RUBEN et al.
; TITLE OF INVENTION: BREAST DISEASE TARGETS AND USES THEREOF
; FILE REFERENCE: CL001624
; CURRENT APPLICATION NUMBER: US/60/717,251
; CURRENT FILING DATE: 2005-09-16
; NUMBER OF SEQ ID NOS: 1966
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 663
; LENGTH: 2015
```

```
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-717-251-663

Query Match 3.2%, Score 292.5; DB 8; Length 2015;
Best Local Similarity 18.9%; Pred. No. 7.2e-13;
Matches 417; Conservative 302; Mismatches 745; Indels 739; Gaps 104;

Qy 41 NKHRRRLLEG-----LSYK--PPSPSSAEKV-KANKQVAPSLKBLGR- 81
Db 26 NALWRRQPEAVHLLDKLKHKPDPIFLFKNPPKNVQOHEKVQKASTEGVAIQOQGRLL 85
Qy 82 -----ISFPLGDERQSQVQLQOC--YLQEDYRG--TRDSVKTVLQDERQSOALL 127
Db 86 LPEQLIKEAFITLSLDFDIGELAAVELLAGSHQHPFPLGRGLVAVLL----- 134
Qy 128 KIADYVEERTCILRCVLHLL-----TYFODERHPYRVEYADCVD 167
Db 135 -----YNDGKFCIANSLKALIQSRGKTWTLELSPELASMTTRFTDELMEQGLTYKVLT- 188
Qy 168 KLEKELYSK--YRQOFELYKTEAPTWTETHGNLMTERQVSRWFVQCLREQSMLLEIFLY 225
Db 189 ----LVSIQIDVNNFEKQLQREGLGSEKH--RKEARVSDLIKEC---RQSLAESLEAW 237
Qy 226 YAYFEMAPSDLLVTKMFKEQGFGFSQRQNRHNVDETMDP--FVDRIGYFSALILVEGMDI 283
Db 238 ACQSPLGKEDTLLI-----GHLERVTVBANGSLDVAVNLALLMALLYCFDI 283
Qy 284 -----ESLHKCALDDRRE---LHQFAQDGLICQDMDCMLMTFGDIPH-HAPVL 327
Db 284 SFIQSTERDDMIHQPLLETKQVIATIHRLQDSQLWK-----LPGLOATVR 332
Qy 328 LAWALLRHTLN--PE-----ETSSVVRKIGGTATQIANVFOYLTRILLOSLGSGNDCITST 380
Db 333 LAWALARGIQLPDVTALAEFTREADEMAELATADNVFLP--LMESVWVVEYFVQBEF 389
Qy 381 ACMCVYGLLS--FVLTSLELHTLGNQD---IDTACEVLADPSLP----- 421
Db 390 YIRRVHNLIITDIALMPMKVKQLNRNRADEADARMIHMSQMGNPEPISLRRLDEHMLLLIG 449
Qy 422 -----ELFWGTPT-----SLGL-----IILDSVCGMF-----P 445
Db 450 ELYKKNPHELEALUEYWCPTPELPQTPTMGSYLGVAHORPPQRVVLSKFLVRQMGDLPP 509
Qy 446 HLLSPQLLRALVSGKSTAKKVYSFLDKMSFYNELYKHKPHDVISHEDGTLRRRQTPKL 505
Db 510 TIYIPYLMQLOGLANGPQCAHYCFSL----- 536
Qy 506 LYPILGGQTNLRIPQGTQGVQVMDRDAYLVIRWEYSYSSWTLFTCEIEMLLHVSTADVIQH 565
Db 537 --KVGSSHVENIQAGGSP-----VSWEHFFHSLMLYH---EHLRKOLPSADSVOY 583
Qy 566 CORVKPIIDLHVHKTISTDLSTADCLLPITSRIYMLQ--RLTTVISP---PVDVIASCVN 620
Db 584 ---RHLPSRGTQK--EQDGLIA--FLQITSTIITWSENARLALCEHPQWTPVVVILGLLQ 637
Qy 621 C-----LTVLAA--RNP---AKVWTDLRHTGFLFPFAHPVYSSLSQMSIASBGMNAG 665
Db 638 CSIPVPLXAEELKTLAAFGKSPETAAASLWQSLEYTQILQTVRIPSQRAIGIEVE----- 692
Qy 666 GYGNNLMNSEQPOQGEYGVITAFRLIITTLVKQGLGSGTOSQGL-----VPCWVFLVKEMLP 720
Db 693 ----LNEIESRCEYPLTRAFQCLISTLVESPPSNLGAIRPPGFPQFQFLRDSVFL 747
Qy 721 SYHKWRYNHSHGVREIQIGCLILELHAILNLCHETDLHSHSTPSL-----QFLCICS---L 772
Db 748 RFRTRAYRAAAKEWAEVLEVFYKLLR-----DYEQLSDFVDVQFVELGEEII 798
Qy 773 AYTEAG-----QTVINMIGIVDTIDMVMMAAQPRSDGAEQGGQGLLIKTIV 818
Db 799 AYKPGFSLMYHLLNLSPEMLALSLBEGVKQLD--TYAPFGKHKLEKAVQHCLALLNL 857
Qy 819 KL-AFSVTNNVIRLKPSPNVVSPLEQAL---SQHGAHGNLNIATVLAKEYIYHKHDPALPRL 874
```


ORGANISM: Homo sapiens
US-60-701-038-307

Query Match	3.2%	Score 291.5;	DB 8;	Length 2012;
Best Local Similarity	18.9%	Pred. No. 8.6e-13;		
Matches 416;	Conservative 302;	Mismatches 744;	Indels 741;	Gaps 104;
Qy	41	NKMRRLLEG-----LSYK--PPSPSSAEKV-KANKDVASPLKELGLR- 81		
Db	26	NALMRQPEAVHLLDKILKKHPDISLFKNPPKNVQOHEKVQKASTGVAIQOQOQTRL 85		
Qy	82	-----ISKFLGIDERSVOLQOC--YLQEDYRG-TRDSVKTVLQDEROSQALIL 127		
Db	86	LPEOLIKEAFILSDILFDIGELAAVELLAGHQHPFGLRGLVAVILL----- 134		
Qy	128	KIADYVVEERTCILRCVLHL-----TYFODERHPYRVEYADCVD 167		
Db	135	-----YWGKKCIANSUKALQSRGKTWTLELSPELASMTTRTFDELMEQGLYKVL- 188		
Qy	168	KLEKELVSK--YRQOFEELYKTEAPTETHGNLMATERQVSRWFVQCLREQSMLEIIFLY 225		
Db	189	-----LVSQIDVNEFEKLRERGLGSEKH-----RKEVSDLIKEC---RQSLAESLFAW 235		
Qy	226	YAYFEMAPSDLLVLTKMPEQFGSGRQTRNHLVDETMDP--FVDRIGYFSALILVEGMDI 283		
Db	236	ACQSPGKEDTLLIT-----GHLERVTVANGSLDVAVNIALLMALLYCPDI 281		
Qy	284	-----ESLHKCALDDBRE--LHQPAQDGLICQDMDCMLMTFGDIPH-HAPVL 327		
Db	282	SFIEOSTBERDMHQLPTEKQIATIHSLRQDSQLWK-----LPGLOATVR 330		
Qy	328	LAWALLRHLN--PE-----ETSSVVRKIGGTAIQANVFQVILTRLOSASGGNDCTTST 380		
Db	331	LAWALARGISQLPDVTALAEFTEADEAMAEIAIADNVFLP--LMESVWVSEYFYQEEF 387		
Qy	381	ACMCVYGLLS--FVLTSLEHLTGNQD-----IIDTACEVLADPSLP----- 421		
Db	388	YIRRVHNLITDPLALMPKVKQLRNRADDEARMHMQMGNEPISLRDLHLMLLIG 447		
Qy	422	-----ELFWGTQPT-----SGLG-----IILDSVCGMF-----P 445		
Db	448	ELYKQNFHLEALSYWCPTPELPTQPTMGSLYGVAHQRPQORQVSKFVRQMGDLPLP 507		
Qy	446	HLLSPLOLLRALVSGKSTAKVYFSLDKMSPYNELYKHPHDVISHEDGTLRRQTPKL 505		
Db	508	TIYIPLYKMLQGLANGPQCAHYCFSLL----- 534		
Qy	506	LYPLGGQNLRIPOGTGVQVMDLDRAYLVRWEYSYSWTLFTCEIEMLLHVVYSTADVIQH 565		
Db	535	--KNGSSHVENIQAGGSP-----VSWEHFFHSLMLYH--EHLRKLPLSADSVOY 581		
Qy	566	CORVXPIIDLHVHKVITDLSIADCLLPITSRIYMLLQ--RLTTVISP--PVDVITASCVN 620		
Db	582	--RHLPISRGITOK--EODGLIA--FLQLTSTIITWSENARLALCCHPQWTPVVVILGLLQ 635		
Qy	621	C-----LTVLAA--RNP--AKWTDLRHGTFLPFVAHPVSSLSQMSIASGEMNAG 665		
Db	636	CSIPPVKXELLKTLAAFKSPEIASLWOSLEYQILQTVIPQORQAIGIEVE----- 690		
Qy	666	GYGNLLMNSQOQGYGVTTIAFLRILITLVKQOLGOSTOSQGL-----VPCVNFVLKEMLP 720		
Db	691	-----LNETESCEEVPLTRAFQCLISTLIVESSFSPNLGAGLRPPGFDPLYQLFLRDSVFL 745		
Qy	721	SVHKRYNSHGVRQIGCCLIELIHALINLCHETDLHSHSTPSL-----QFLCICS--L 772		
Db	746	RFRTRAYRAAEKWEAVEVLEVFYKLLR-----DYEQLBEDFVDQFVLEGOEEII 796		
Qy	773	AYTEAG-----QTVINIMGIGVTDIMWMAAQPRSDGAEQOGQQLIKTV 818		
Db	797	AYKPGFSLMYHLLNESPMLEALSLEEGVKQLD--TYAPFGKKHLEKAVQCHLALLNL 855		
Qy	819	KL-AFVSVTNNVIRLPPSPNVVSPLEQAL---SOHGAGHGNLIVIAKYIYHKHDPALPRL 874		

Db	856	TLQKENLPMDLRESQALIVCPLEQLLQQLQINPRTKKADNVNVI-ARYLYHGN--TNPEL 912		
Qy	875	AIQLKRLATVAPMS-----VYACLGNDAAA--IRDAFLTRL 909		
Db	913	AFESAKILCCISCNSNIQIKLVGDFTHDQDSISQKLMAGFVECLDCEDAEFVRLSESEL 972		
Qy	910	QSKIEDMR--IKVMILEFLTVAVETQGLTFLP-LNLEVKDGSOGSKSEFSIGMW-----SC 962		
Db	973	EKKLVAIRHETRIHILNLLITSLECNPPNLAALYLLGPELKKPVSTTNLQDPGVLCGPRTC 1032		
Qy	963	LHAVLELDSQQOQDRYWCPPLLHRAAIAFLHALWQ-----DRRDSAMLVRLTKPKF 1013		
Db	1033	LHAILNILEKTEGR--TGPVAVRESQLAELCQVLYQLCACSDTSOPTWRYLRTSODF 1090		
Qy	1014	WENLTSPLFGTLS--PPSETS-EPSIILETCALIMKIICLEIYVYVKGSLDOSLQDST----- 1066		
Db	1091	-----LFSQLQVLPFSNKEYEISMLNQMSLWMLKTASIELRVT--SLNRQSHQTRL 1140		
Qy	1067	-----LKFS-----IEKRFAYWSGY----- 1082		
Db	1141	HLLDDMPVKPYSDGEGIEDENRSVSGFLHFDTATKVRKILNILDIDFSQEIPEPLQ 1200		
Qy	1083	-----VKSL-AVHVAETEG-----SSCT 1099		
Db	1201	LDFFDRAQIEQVIANCEHKNLRGQTVCNVLLHRLVLAENVALQGMMAIGORPLLMEEIS 1260		
Qy	1100	SLLEY-----QMLVSAWRML--LIATTHADIMHLLTD-SVVRRLQFLDV-- 1140		
Db	1261	TVLYVVGKRLQLQCHAKHRALESWRQLVEIILTACPDQLIQAEDRQLIIRDILOQVHD 1320		
Qy	1141	LGVTKALLVPASVNCRLGSMKCTLLILLRQWKRELSVDIELGP----- 1187		
Db	1321	KILDEAAQALMPVAVAGA--VFTLTAHLSQAVLTEQKE-----TSVLGPAEAHAFMLDS 1373		
Qy	1188	-----LTEILEGVLOAQDLMEKTKAKVSAFIVTLQWK 1221		
Db	1374	CFTSPPEENPLVGFASIGSSSLYIILKKLLDFILKTGGG-FQVRTHLYGSLLYLQIA 1432		
Qy	1222	E-----MKVSDIPOYSQVL--NVCETLOEEVIALFDQTRHSLALGATED-----KDSM 1269		
Db	1433	QRPDSPDTEAAKKTWMERLTAPEDEVFSLQRENIATIE-----SYGAALMEVVVCRDAC 1486		
Qy	1270	ETDCSRSRHRDQDQGVIGLHLAKELCEVDEGDSWLVQVTRRLPIPLTLTLTLEVSRL 1329		
Db	1487	DGHEIGR-----MLALALLDRIVSDKQ-QQWLLYLSNSGYLUKLVDSLVEDDR 1534		
Qy	1330	MKQN-----LHFEATLHLLLTATQOGATAVAGATQSIQCLPLSVYQLST 1378		
Db	1535	TLQSLTTPQPLKALYTESKMAFLTRVAKIQGALLESQVI--VRLAQCVYDHRP 1592		
Qy	1379	NGTAQTPSASR-KSLDAPSWPGVYRLSMLMEQLLKLTRYNLFPLDALDFVG-----VHQ 1431		
Db	1593	ETDQSMGEMRDPNMFITPVDVRYQIILLPALQCOVILTSSMAQHLQAAGVQLFLISH 1652		
Qy	1432	ERTQCLANAVTVOSLACLEADHTVGFILQSLNFMKEWHFHLPOLMR--DIQVNLGYLC 1489		
Db	1653	SDTIQAILRCQDV-SAGSLQELALLTGIISKAA-----LPGILSELVDVNEGSLM 1702		
Qy	1490	Q-----ACTSLH--SRKMLQHYLQNKNGDGLPSAVAQVRQRPSPSAASAAPSS 1535		
Db	1703	ELQGHIGRFQRCGLGSLRFRGSGRKLRFKQDDNVEG-----DKV 1743		
Qy	1536	SKQPAADTEASEQQALHTVQYGLLKLILSKTLAALRHFTPDVCQILLDOSLDIAEYNFLFA 1595		
Db	1744	SKKDEIEL-AMQICANWMEY-----CQSLMQS-----SPTFQHA 1778		
Qy	1596	LSFTPTPTDSEV-----APSFOTLLATVNVNL-----MLG 1626		
Db	1779	VCLFPTSLSETVNRDPRQDTQAPVVPYWRPLPGLGIIIVLLKQSANDEFFSYDSDRQSVS 1838		
Qy	1627	EL-----DKKKEPLTOAV-----GLSTQAE-----GTRTLKSLMFTM 1659		
Db	1839	KLQNVQEQLPPDPEIKE-LCQSVNPAQVDKISTAQKTVLARRRLVKVINNRKALLSLCSFII 1897		

Qy 1660 ENC FYLLISQAMRYLRDPVH--PRDKORMKQELSSSELSTLLSSLSRYFRGAPSSPATG 1717
Db 1898 ETC LFIL-----WRHLEYLLHCHMPTDSQ-----DSLPA SRLFKSRRLQDSFAS- 1942
Qy 1718 VLPSPQCKSTSL---SKASPESQEP LIQL-----VQAFVRHMQR 1753
Db 1943 -----ETNLD FRSGLAIVSQHDL DQLQADAINAFGESLQK 1977

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Job time : 151 secs